INDEX OF AUTHORS' NAMES.

TRANSACTIONS. 1922.

A.

Agashe, *Ganesh Sakharam*, obituary notice of, 745.

Aldridge, (*Miss*) *Joan*, and *Malcolm Percival* **Applebey,** the peroxidic compounds of copper, 238.

Anderson, *Paul*, some properties of hydrogen desorbed from platinum and palladium, 1153.

Applebey, *Malcolm Percival*, and *Robert Douglas* **Reid,** the isomerism of metallic oxides. Part I. Lead monoxide, 2129.

Applebey, *Malcolm Percival*, and *Sydney Herbert* **Wilkes,** the system ferric oxide–sulphuric acid–water, 337.

Applebey, *Malcolm Percival*. See also (*Miss*) *Joan* **Aldridge.**

Appleyard, *James Robert*, obituary notice of, 2898.

Archibald, *Ebenezer Henry*, and *William A.* **Gale,** the hydrolysis of platinum salts. Part II. Potassium platinibromide, 2849.

Armit, *James Wilson*, and *Robert* **Robinson,** polynuclear heterocyclic aromatic types. Part I. Some indenoquinoline derivatives, 827.

Ashley, *Julius Nicholson*. See *Archibald Edwin* **Goddard.**

Avasare, *Mahadeo Dattatraya*. See *Kuverji Gosai* **Naik.**

B.

Bailey, *Robert Arthur*. See *Edward Charles Cyril* **Baly.**

Baines, *Harry*, the mechanism of the bromination of phenol in aqueous solution, 2811.

Baker, *Herbert Brereton*, change of properties of substances on drying, 568.

Baker, *Julian Levett*, and *Henry Francis Everard* **Hulton,** amylases of the cereal grains—the "insoluble" amylase of barley, 1929.

Balaban, *Isidore Elkanah*, and *Frank Lee* **Pyman,** bromo-derivatives of glyoxaline, 947.

Bales, *Sidney Hartley*, and *Stanley Arthur* **Nickelson,** hydrolysis of ββ′-dichlorodiethyl sulphide; synthesis of divinyl sulphide and the preparation of a non-vesicant isomeride of ββ′-dichlorodiethyl sulphide, 2137.

Baly, *Edward Charles Cyril*, and *Robert Arthur* **Bailey,** the equilibria in aqueous solutions of the alkali metal bisulphites, 1813.

Baly, *Edward Charles Cyril*, and *Herbert Maxwell* **Duncan,** the reactivity of ammonia, 1008.

Baly, *Edward Charles Cyril*, *Isidor Morris* **Heilbron,** and *Donald Pryce* **Hudson,** photocatalysis. Part II. The photosynthesis of nitrogen compounds from nitrates and carbon dioxide, 1078.

Barker, *Thomas Vipond*. See *Gilbert Thomas* **Morgan.**

Barnett, *Edward de Barry*, and *James Wilfred* **Cook,** pyridinium salts derived from some chloroacetylamino-compounds, 792.

studies in the anthracene series. Part II., 1376.

Barnett, *Edward de Barry*, *James Wilfred* **Cook,** and *Herbert Henry* **Grainger,** studies in the anthracene series. Part III., 2059.

Barrow, *Fred*, *Evan Dalton* **Griffiths,** and *Edward* **Bloom,** *N*-oximino-ethers. Part II. *N*-Aryl ethers of 2:4- and 2:6-dinitrobenzaldoximes, 1713.

Bassett, *Henry*, and *Reginald Graham* **Durrant,** action of ammonium nitrate and of aqueous ammonia on copper; properties of cupric tetrammine nitrite and nitrate, 2630.

Becker, *Oscar*, and *Jocelyn Field* **Thorpe,** the intermolecular condensation of methyl ethyl ketone in the presence of calcium carbide, 1303.

Bell, *James*. See *Emil Alphonse* **Werner.**

Bennett, *George Macdonald*, autoreduction of sulphurous acid, 1794.

monothioethylene glycol 2139.

Bentivoglio, (*Miss*) *Marie.* See *John* **Read.**

Berry, *Arthur John,* studies on thallium compounds. Part I. Analytical, 394.

Birch, *Stanley Francis,* and *Jocelyn Field* **Thorpe,** the formation and stability of *spiro*-compounds. Part IX. The influence on stability of groups of high molecular weight, 1821.

Bircumshaw, *Louis Leighton,* the surface tension of mixtures of alcohol and water at 25°, 887.

Bishop, *Gerald,* and *Oscar Lisle* **Brady,** 2:4-dinitrobenzil, 2364.

Black, *Ian Armstrong, Edmund Langley* **Hirst,** and *Alexander Killen* **Macbeth,** the labile nature of the halogen atom in organic compounds. Part VI. The action of titanous chloride and of ammonia on representative halogen compounds, 2527.

Bloom, *Edward.* See *Fred* **Barrow.**

Boeree, *Alford Reginald.* See *Dalziel Llewellyn* **Hammick.**

Bosman, *Louis Pierre,* castelin, a new glucoside from *Castela Nicholsoni,* 969.

Bradshaw, *Geoffrey Gordon,* and *Arthur George* **Perkin,** derivatives of 2-hydroxybenzanthrone. Part I., 911.

Brady, *Oscar Lisle,* the nitration of *m*-nitrotoluene, 328.

Brady, *Oscar Lisle, James Nelson Edmund* **Day,** and *William Joseph Woodgate* **Rolt,** the dinitrotoluidines, 526.

Brady, *Oscar Lisle,* and *Gerald Patrick* **McHugh,** the alkylhydrazones, 1648.

Brady, *Oscar Lisle,* and *Clifford Dane* **Thomas,** the isomerism of the oximes. Part X. Cinnam- and nitrocinnamaldoximes, 2098.

Brady, *Oscar Lisle.* See also *Gerald* **Bishop.**

Bragg, (*Sir*) *William Henry,* the significance of crystal structure, 2766.

Braunholtz, *Walter Theodore Karl,* a comparison of three isomeric carbocyanines, 169.

reactions of the phosphazines, 300.

Braunholtz, *Walter Theodore Karl,* and *William Hobson* **Mills,** the cyanine dyes. Part VI. Dyes containing a quinoline and a benzothiazole nucleus; the thioisocyanines, 2004.

Braunholtz, *Walter Theodore Karl.* See also *William Hobson* **Mills.**

Britton, *Hubert Thomas Stanley,* the system potassium sulphate–aluminium sulphate–water at 25°, 982.

the system ammonium sulphate–glucinum sulphate–water at 25°, 2612.

Brown, *Adrian,* obituary notice of, 2899.

Brown, *Andrew Charles,* the adsorption of uranium-*X* and its isotope, thorium, by basic ferric acetate, 1736.

Brown, *David Christie.* See *George Gerald* **Henderson.**

Browne, (*Miss*) *Agnes.* See *Douglas Norman* **Jackman.**

Buck, *Johannes Sybrandt,* and *Isidor Morris* **Heilbron,** the reactivity of doubly-conjugated unsaturated ketones. Part III. Unsymmetrical hydroxy- and methoxy-derivatives, 1095.

benzopyrylium salts of distyryl ketones. Part I., 1198.

Buckley, *Harold.* See *Lionel Felix* **Gilbert.**

Bunbury, *Hugh Mills,* the sorption of carbonyl chloride by beechwood charcoal, 1525.

Burgess, *Henry.* See *Thomas Martin* **Lowry.**

Burnett, *Arthur John.* See *James William* **McBain.**

Burns, *Robert.* See *Forsyth James* **Wilson.**

Burton, *Harold,* and *James* **Kenner,** the influence of nitro-groups on the reactivity of substituents in the benzene nucleus. Part V. Heteronucleal dinitro-derivatives, 489.

the influence of nitro-groups on the reactivity of substituents in the benzene nucleus. Part VI. The elimination of halogen during the reduction of halogenated nitro-compounds, 675.

Bury, *Frank Ward,* and *James Riddick* **Partington,** preparation and reactions of stannous oxide and stannous hydroxides, 1998.

C.

Campbell, *Arthur Fred,* the speed of sulphonation of phenols. Part I. The effect of temperature and the methyl group, 847.

Campbell, *Colin,* the propagation of explosion waves in gases contained in tubes of varying cross-section, 2483.

Carmichael, (*Miss*) *Mabel,* electro-synthesis of azelaic and thapsic acids, 2545.

Carruthers, *Albert,* and *Edmund Langley* **Hirst,** methylation of xylose, 2299.

Cashmore, *Albert Eric, Hamilton* **McCombie,** and *Harold Archibald* **Scarborough,** the velocity of reaction in mixed solvents. Part II. The velocity of saponification of the ethyl esters of some monosubstituted benzoic acids, 243.

Caven, *Robert Martin*, and *John* **Ferguson**, the dissociation pressures of hydrated double sulphates. Part I. Hydrated cupric alkali sulphates, 1406.

Challenger, *Frederick*, and *Leslie Randal* **Ridgway**, organo-derivatives of bismuth. Part VI. The preparation and properties of tertiary aromatic bismuthines and their interaction with organic and inorganic halogen compounds, 104.

Challenger, *Frederick*, and *John Frederick* **Wilkinson**, organo-derivatives of bismuth. Part V. The stability of halogen, cyano-, and thiocyano-derivatives of tertiary aromatic bismuthines, 91.

Chandrasena, *Juan Pedige Charles*, and *Christopher Kelk* **Ingold**, the conditions underlying the formation of unsaturated and cyclic compounds from halogenated open-chain derivatives. Part IV. Products formed from halogen derivatives of muconic acid; the constitution of muconic acid, 1306.

effect of attached groups on the ease of formation of the *cyclo*pentane ring, 1552.

Chandrasena, *Juan Pedige Charles*, *Christopher Kelk* **Ingold**, and *Jocelyn Field* **Thorpe**, the chemistry of polycyclic structures in relation to their homocyclic unsaturated isomerides. Part III. Intra-annular tautomerism of α-campholytic acid, 1542.

Chapman, *Arthur William*, imino-aryl ethers. Part I. *N*-Phenylbenziminо-*m*-hydroxyphenyl ether and the synthesis of 2 : 4-dihydroxybenzophenone, 1676.

Chattaway, *Frederick Daniel*, and *Hinton John* **Harris**, the oxidation of sucrose by nitric acid, 2703.

Chattaway, *Frederick Daniel*, and *Henry Rowland* **Hill**, the interaction of diazonium salts and phenols, 2756.

Chattaway, *Frederick Daniel*, and *Deric William* **Parkes**, isomeric citraconyl hydrazides, 283.

Choudhury, *Kumud Nath*. See *Haridas* **Saha**.

Christie, *George Hallatt*, and *James* **Kenner**, the molecular configurations of polynuclear aromatic compounds. Part I. The resolution of γ-6 : 6′-dinitro- and 4 : 6 : 4′ : 6′-tetranitrodiphenic acids into optically active components, 614.

Clark, *Walter*. See *Sidney Owen* **Rawling**.

Clayton, *Herbert*. See *William* **Davies**, and *Nevil Vincent* **Sidgwick**.

Clemo, *George Roger*, and *William Henry* **Perkin**, *jun.*, introduction of the chloroethyl group into phenols, alcohols, and amino-compounds, 642.

Clendinnen, *Frederick William Jeffrey*, mixed crystal formation in ternary systems containing water, ammonium chloride, and ferrous, cobaltous, or nickel chloride, 801.

Clews, *Francis Herbert*, and *Hugh Vernon* **Thompson**, the interaction of sodium chloride and silica, 1442.

Clutterbuck, *Percival Walter*, and *Julius Berend* **Cohen**, the aliphatic sulphonamides. Part I., 120.

Coffey, *Samuel*, the mechanism of the oxidation of drying oils as elucidated by a study of the true oxygen absorption. Part III. The action of driers, 17.

Cohen, *Julius Berend*. See *Percival Walter* **Clutterbuck**, *Victor* **Froelicher**, *John Richard* **Scott**, *Akira* **Shimomura**, and *Edward Johnson* **Wayne**.

Collie, *John Norman*, and (*Miss*) *Amy Ada Beatrice* **Reilly**, diacetylacetone, 1984.

Collins, *George Ernest*, and *John Kerfoot* **Wood**, the amphoteric character of stannic hydroxide and its bearing on the isomerism of the stannic acids, 441.

the behaviour of the stannic acids towards hydrochloric acid, 1122.

the behaviour of the stannic acids towards solutions of alkaline hydroxides, 2760.

Cook, *James Wilfred*. See *Edward de Barry* **Barnett**.

Cooper, *E. A.* See *Gilbert Thomas* **Morgan**.

Coulson, *William*. See *Aquila* **Forster**.

Coysh, *Reginald Henry*. See *Francis Ernest* **Francis**.

Crabtree, *Herbert Grace*, and *Robert* **Robinson**, a synthesis of *iso*brazilein and certain related anhydropyranol salts. Part II. Synthesis of *iso*-hæmatein, 1033.

Cranston, *John Arnold*, and *Robert* **Hutton**, the adsorption of radium-*B* and radium-*C* by ferric hydroxide, 2843.

Crawford, *Archibald Barclay*. See *Forsyth James* **Wilson**.

Cumming, *William Murdoch*, the hydroferrocyanides and hydroferricyanides of the organic bases. Part I., 1287.

Currey, *Geoffrey Saunders*, the colouring matter of the scarlet pelargonium, 319.

Cutter, *John Outram.* See *Thomas Martin* **Lowry.**

D.

Das, *Radhakishen.* See (*Sir*) *Prafulla Chandra* **Rây.**

Dash, *Wilfred Marsden.* See *Nevil Vincent* **Sidgwick.**

Davies, *John Stanley Herbert.* See *Frederick Maurice* **Rowe.**

Davies, *William,* preparation of *p*-nitrophenylhydrazine and other aromatic hydrazines, 715.

the cumulative effect of the chlorine atom and the methyl and sulphonyl chloride groups on substitution in the benzene nucleus. Part III., 785.

an instance of the apparent effect of the entering group on the position of substitution in the benzene nucleus, 806.

Davies, *William,* and *Edgar Herbert Cuthbert* **Hickox,** the synthesis of *m*-α-benzbispyrrole derivatives, 2640.

Davies, *William,* and *William Henry* **Perkin,** *jun.* [with *Herbert* **Clayton**], the chlorination and bromination of the toluic acids and the preparation of the phthalaldehydic acids, 2202.

Dawkins, *Alfred Ernest,* heterogeneous equilibria; the ternary system sodium sulphate – sodium carbonate – water, 776.

Day, *James Nelson Edmund.* See *Oscar Lisle* **Brady.**

Dennett, *John Horace.* See *John Albert Newton* **Friend.**

Deshapande, *Shankar Shridhar,* and *Jocelyn Field* **Thorpe,** ring-chain tautomerism. Part II. The effect of the *gem*-diethyl group on the carbon tetrahedral angle, 1430.

Dickens, *Frank, George Armand Robert* **Kon,** and *Jocelyn Field* **Thorpe,** the formation and stability of *spiro*-compounds. Part VIII. The Dieckmann-Komppa reaction, 1496.

Doubleday, (*Miss*) *Ida,* boundary lubrication and chemical constitution; the optically active carbinols of the formula $C_2H_5{\cdot}CH(OH){\cdot}C_nH_{2n+1}$, 2875.

Drakeley, *Thomas James* [with *Frederick William* **Smith**], the ultimate composition of British coals, 221.

Drew, *Harry Dugald Keith.* See *Gilbert Thomas* **Morgan.**

Driver, *John,* and *James Brierley* **Firth,** the sorption of saturated vapours by charcoal, 2409.

Druce, *John Gerald Frederick,* isopropylstannonic acid and its derivatives, 1859.

Duckham, (*Miss*) *Rebecca.* See *William Howieson* **Gibson.**

Duff, *James Cooper,* complex metallic ammines. Part VII. Conductivities of diethylenediaminecobaltic bromides, 450.

Dufton, *Arthur Felix,* the separation of miscible liquids by distillation. Part II., 306.

Duncan, *Herbert Maxwell.* See *Edward Charles Cyril* **Baly.**

Durrans, *Thomas Harold,* the action of sulphuryl chloride on organic substances. Part I. Simple monosubstituted benzenes, 44.

Durrant, *Reginald Graham.* See *Henry* **Bassett.**

Dutt, *Sikhibhushan,* dyes derived from phenanthraquinone. Part II. Naphthaflavindulines, 1951.

dyes derived from "saccharin"; the sulphamphthaleins, 2389.

Dutt, *Sikhibhushan,* and *Nirmal Kumar* **Sen,** dyes derived from αα′-dicyanodibenzyl diketone, 2663.

Dutt, *Sikhibhushan.* See also *Anukul Chandra* **Sircar,** and *Edwin Roy* **Watson.**

E.

Earl, *John Campbell.* See *James Colquhoun* **Irvine.**

Early, *Reginald George,* and *Thomas Martin* **Lowry,** the properties of ammonium nitrate. Part III. Ammonium nitrate and sodium nitrate, 963.

Edge. *Stephen Rathbone Holden,* benzbisthiazoles, 772.

Elliott, *George Robert,* preparation and properties of the benzochloroamides, 202.

Evans, *Richard Bromley.* See *Archibald Edwin* **Goddard.**

Ewbank, (*Miss*) *Elinor Katharine.* See *Nevil Vincent* **Sidgwick.**

F.

Fairbairn, (*Miss*) *Ruth.* See *William Howieson* **Gibson.**

Fairbrother, *Fred,* and *Enoch* **Swan,** the dissolution of gelatin, 1237.

Falkner, (*Miss*) *D. H.* See (*Miss*) *Mabel Harriet* **Norris.**

Farmer, *Ernest Harold,* the addition of ethyl sodiocyanoacetate and ethyl sodiomalonate to ethyl muconate, 2015.

Farmer, *Ernest Harold*, *Christopher Kelk* **Ingold**, and *Jocelyn Field* **Thorpe**, the chemistry of polycyclic structures in relation to their homocyclic unsaturated isomerides. Part II. Intra-annular tautomerism, 128.

Farmer, *Robert Crosbie*, the velocity of decomposition of high explosives in a vacuum. Part III. Mercuric fulminate, 174.

Ferguson, *John*. See *Robert Martin* **Caven**.

Finch, *George Ingle*, and *Raymond Harold Kelsall* **Peto**, purification of phosphoric oxide, 692.

Findlay, *Alexander*, and *Owen Rhys* **Howell**, the rate of evolution of carbon dioxide from solution in presence of colloids, 1046.

Fioletova, *Alexandra*. See *Nicolai Antonovich* **Pushin**.

Firth, *James Brierley*. See *John* **Driver**.

Flecker, *Oriel Joyce*, and (*Miss*) *Millicent* **Taylor**, studies of the constitution of soap solutions; sodium behenate and sodium nonoate, 1101.

Forster, *Aquila*, and *William* **Coulson**, nitro-derivatives of *m*-nitrodimethylaniline, 1988.

Forster, *Martin Onslow*, and *William Bristow* **Saville**, constitution of picrorocellin, a diketopiperazine derivative from *Roccella fuciformis*, 816.

the triazo-group. Part XXII. Cinnamic acid chlorohydrin and its conversion into α-triazo-β-hydroxy-β-phenylpropionic acid, 2595.

Francis, *Francis Ernest* [with *John Clifford* **Pope** and *Reginald Henry* **Coysh**], the composition of paraffin wax. Part I., 496.

Francis, *Francis Ernest*, *Cyril Mercer* **Watkins**, and *Reginald Wilfred* **Wallington**, the composition of paraffin wax. Parts II. and III., 1529, 2804.

Fraser, *Ronald*, a note on the constitution of benzene, 188.

Friend, *John Albert Newton*, and *John Horace* **Dennett**, the rate of solution of iron in dilute sulphuric acid both when stationary and under rotation, 41.

Friend, *John Albert Newton*, and *Reece Henry* **Vallance**, the influence of protective colloids on the corrosion of metals and on the velocity of chemical and physical change, 466.

Froelicher, *Victor*, and *Julius Berend* **Cohen**, the nitro- and amino-derivatives of *o*- and *p*-methoxybenzoic acids and of α- and β-methoxynaphthoic acids, 1652.

G.

Gale, *William A*. See *Ebenezer Henry* **Archibald**.

Garner, *William Edward*, and *Douglas Norman* **Jackman**, note on the effect of a magnetic field on catalysis by ions in the presence of a paramagnetic salt, 1298.

Garner, *William Edward*, and *Kichimatsu* **Matsuno**, the explosion of acetylene and nitrogen. Part II., 1729.

General Electric Co., Ltd., London, Research Staff [by *Colin James* **Smithells**], reduction of thorium oxide by metallic tungsten, 2236.

Gentle, *Joseph Alfred Hector Roberts*. See *Nevil Vincent* **Sidgwick**.

Gibson, *William Howieson*, (*Miss*) *Rebecca* **Duckham**, and (*Miss*) *Ruth* **Fairbairn**, the products of nitration of toluene, 270.

Gilbert, *Lionel Felix*, *Harold* **Buckley**, and *James Irvine Orme* **Masson**, the system chromium trioxide–sulphur trioxide–water, 1934.

Gilmour, *George van Barneveld*, the constitution and rotatory powers of mannitol and fructose complexes formed in solutions containing boric acid and sodium hydroxide, 1333.

Glagoleva, *Alexandra Alexandrovna*. See *Nicolai Antonovich* **Pushin**.

Glasstone, *Samuel*, physical chemistry of the oxides of lead. Part III. Hydrated lead monoxide, 58.

physical chemistry of the oxides of lead. Part IV. Red lead and lead sesquioxide, 1456.

physical chemistry of the oxides of lead. Part V. The electromotive behaviour of lead dioxide, 1469.

physical chemistry of the oxides of lead. Part VI. The anodic behaviour of lead and lead dioxide, 2091.

Goddard, *Archibald Edwin*, organo-derivatives of thallium. Part III. Some thalliumdialkyl salts and the preparation of thalliumdiaryl haloids, 36.

Goddard, *Archibald Edwin*, *Julius Nicholson* **Ashley**, and *Richard Bromley* **Evans**, organo-derivatives of tin and lead. Part I. Application of lead and tin tetraphenyls in the preparation of organo-metallic compounds, 978.

Goddard, *Archibald Edwin*, and (*Mrs.*) *Dorothy* **Goddard**, organo-derivatives of thallium. Part V. The preparation of thallium diaryl salts, 482.

Goddard, *Archibald Edwin*, and *James Bertram* **Ward**, metallic derivatives of nitrophenolic compounds. Part IV. Some complex nitrophenoxides of magnesium, silver, and lead, 262.

Goddard, *Archibald Edwin*. See also (*Mrs.*) *Dorothy* **Goddard**.

Goddard, (*Mrs.*) *Dorothy*, and *Archibald Edwin* **Goddard**, metallic derivatives of nitrophenolic compounds. Part III. Nitrophenoxides of the alkali metals, 54.

organo-derivatives of thallium. Part IV. Action of thallium chlorides on the Grignard reagent and on organo-derivatives of tin, lead, and bismuth, 256.

Goddard, (*Mrs.*) *Dorothy*. See also *Archibald Edwin* **Goddard**.

Gowland, *William*, obituary notice of, 2907.

Graham, *Hugh*, and *Alexander Killen* **Macbeth**, the labile nature of the halogen atom in organic compounds. Part III. The absorption spectra of bromomalonic derivatives and nitroparaffins, and their bearing on the question of an oxygen–halogen linking, 1109.

the labile nature of the halogen atom in organic compounds. Part VII. Absorption spectra of the halogen derivatives of some cyclic compounds, and their bearing on the question of an oxygen–halogen linking, 2601.

Graham, *Hugh*. See also *Samuel* **Smiles**.

Grainger, *Herbert Henry*. See *Edward de Barry* **Barnett**.

Greene, *Herbert*, and *Robert* **Robinson**, the mechanism of the formation of benzoylbenzoin by treatment of benzoylmandelonitrile with an alcoholic solution of sodium ethoxide, 2182.

Gregory, *John Walter*, ore deposits and their genesis in relation to geographical distribution, 750.

Griffiths, *Evan Dalton*. See *Fred* **Barrow**.

Gupta, *Biraj Mohan*, and *Jocelyn Field* **Thorpe**, the formation of bromine derivatives of carbon compounds without the production of hydrogen bromide, 1896.

Guye, *Philippe Auguste*, obituary notice of, 2909.

H.

Hamer, (*Miss*) *Frances Mary*. See *William Hobson* **Mills**.

Hammick, *Dalziel Llewellyn*, and *Alford Reginald* **Boeree**, preparation of α-trioxymethylene and a new polymeride of formaldehyde, 2738.

Hammick, *Dalziel Llewellyn*, and *George Hazlewood* **Locket**, preparation of sodium and potassium phthalimide, 2362.

Harris, *Hinton John*. See *Frederick Daniel* **Chattaway**.

Harris, *John Edmund Guy*, and (*Sir*) *William Jackson* **Pope**, *iso*quinoline and the *iso*quinoline-reds, 1029.

Harrison, *Douglas Creese*. See *Samuel* **Smiles**.

Harrison, *Edward Frank*, memorial to, 2894, 2917.

Hartung, *Ernst Johannes*, the action of light on silver bromide, 682.

Hawkins, *James Alexander*, the influence of solvents on the velocity of formation of quaternary ammonium salts, 1170.

Haworth, *Robert Downs*, and *Arthur* **Lapworth**, the direct acetalisation of aldehydes, 76.

Haworth, *Walter Norman*, and (*Miss*) *Grace Cumming* **Leitch**, the constitution of the disaccharides. Part VI. The biose of amygdalin, 1921.

Haywood, *Percy Charles*, the reactivity of alkyl iodides with sodium benzyloxide and the effect of temperature on such reactions, 1904.

Heilbron, *Isidor Morris*. See *Edward Charles Cyril* **Baly**, and *Johannes Sybrandt* **Buck**.

Henderson, *George Gerald*, *John McGregor* **Robertson**, and *David Christie* **Brown**, the oxidation of sabinene with chromyl chloride, 2717.

Henderson, *Thomas*, and *Alexander Killen* **Macbeth**, the labile nature of the halogen atom in organic compounds. Part I. Titanium reductions of substituted nitroparaffins, 892.

Henry, *Thomas Anderson*, and *Thomas Marvel* **Sharp**, mercury compounds of hydroxybenzaldehydes, 1055.

Henstock, *Herbert*, the solubility of phenanthrene in various organic solvents, 2124.

Hickman, *Kenneth Claude Devereux*, and *Reginald Patrick* **Linstead**, a modified methyl-orange indicator, 2502.

Hickox, *Edgar Herbert Cuthbert*. See *William* **Davies**.

Higginbotham, (*Miss*) *Lucy*, and *Arthur* **Lapworth**, the formation of substituted succinic acids from esters of αβ-unsaturated acids, 49.

Higginbotham, (*Miss*) *Lucy*, and *Arthur* **Lapworth** [with *Charles* **Simpson**], formation of γ-alkylidene derivatives from ethylidenemalonic ester, 2823.

Hill, *Henry Rowland*. See *Frederick Daniel* **Chattaway**.

Hinkel, *Leonard Eric*, and *William Dudley* **Williams**, action of the chlorides of phosphorus on chlorodimethyldihydroresorcinol, 2498.

Hinshelwood, *Cyril Norman*. See *Harold Calvert* **Tingey**.

Hirst, *Edmund Langley*, and *Alexander Killen* **Macbeth**, the labile nature of the halogen atom in organic compounds. Part II. Action of hydrazine on nitrogen–halogen compounds and on bromomalonic esters, 904.

the labile nature of the halogen atom in organic compounds. Part V. The action of hydrazine on the halogen derivatives of some esters and substituted *cyclo*hexanes, 2169.

Hirst, *Edmund Langley*. See also *Ian Armstrong* **Black**, *Albert* **Carruthers**, and *James Colquhoun* **Irvine**.

Hope, *Edward*, ethyl α-cyano-β-methylglutaconate and its methyl homologues, 2216.

Hope, *Edward*, and *George Clifford* **Riley**, chlorination of benzoyl chloride. Part I., 2510.

Hope, *Edward*, and *Wilfrid* **Sheldon**, the addition of hydrogen cyanide to derivatives of glutaconic acid. Part I. The addition of hydrogen cyanide to ethyl α-cyano-β-methylglutaconate and its homologues, 2223.

Hopper, *Isaac Vance*. See *Forsyth James* **Wilson**.

Howell, *Owen Rhys*. See *Alexander* **Findlay**.

Hudson, *Donald Pryce*. See *Edward Charles Cyril* **Baly**.

Hulton, *Henry Francis Everard*. See *Julian Levett* **Baker**.

Hurst, *Eric*. See *John* **Read**.

Hutton, *Robert*. See *John Arnold* **Cranston**.

I.

Ingold, *Christopher Kelk*, the structure of the benzene nucleus. Part I. Intra-nuclear tautomerism, 1133.

the structure of the benzene nucleus. Part II. Synthetic formation of the bridged modification of the nucleus, 1143.

the form of the vapour-pressure curve at high temperature. Part I. The curve for lead, 2419.

Ingold, *Christopher Kelk*, the conditions underlying the formation of unsaturated and cyclic compounds from halogenated open-chain derivatives. Part V. Products derived from α-halogenated β-methylglutaric acids, 2676.

Ingold, *Christopher Kelk*, and *Lewis Charles* **Nickolls**, experiments on the synthesis of the polyacetic acids of methane. Part VII. *iso*Butylene-αγγ′-tricarboxylic acid and methanetetra-acetic acid, 1638.

Ingold, *Christopher Kelk*, and *Edward Arthur* **Perren**, experiments on the synthesis of the polyacetic acids of methane. Part VI. Methanetriacetic acid and its unstable esters, 1414.

Ingold, *Christopher Kelk*, *Edward Arthur* **Perren**, and *Jocelyn Field* **Thorpe**, ring-chain tautomerism. Part III. The occurrence of tautomerism of the three-carbon (glutaconic) type between a homocyclic compound and its unsaturated open-chain isomeride, 1765.

Ingold, *Christopher Kelk*, and *Henry Alfred* **Piggott**, the mobility of symmetrical triad systems. Part I. The conditions relating to systems terminated by phenyl groups, 2381.

the additive formation of four-membered rings. Part I. The synthesis and division of derivatives from 1:3-dimethindiazidine, 2793.

Ingold, *Christopher Kelk*, *Shinichi* **Sato**, and *Jocelyn Field* **Thorpe**, the influence of substituents on the formation and stability of heterocyclic compounds. Part I. Hydantoins, 1177.

Ingold, *Christopher Kelk*, and (*Miss*) *Edith Hilda* **Usherwood**, the specific heats of gases with special reference to hydrogen, 2286.

Ingold, *Christopher Kelk*, and *Daniel* **Wilson**, the reversibility of the reaction between nitrogen, carbon, and sodium carbonate, 2278.

Ingold, *Christopher Kelk*. See also *Juan Pedige Charles* **Chandrasena**, and *Ernest Harold* **Farmer**.

Iredale, *Thomas*, the rôle of protective colloids in catalysis. Part II., 1536.

Irvine, *James Colquhoun*, and *John Campbell* **Earl**, mutarotation and pseudo-mutarotation of glucosamine and its derivatives, 2370.

salicylidene derivatives of *d*-glucosamine, 2376.

Irvine, *James Colquhoun*, and *Edmund Langley* **Hirst**, 2:3:6-trimethyl glucose, 1213.

Irvine, *James Colquhoun,* and *Edmund Langley* **Hirst,** the constitution of polysaccharides. Part V. The yield of glucose from cotton cellulose, 1585.

Irvine, *James Colquhoun,* and *Jocelyn* **Patterson,** the constitution of acetone derivatives of glucose and fructose, 2146.

1:3:4:6-tetramethyl fructose, 2696.

Irvine, *James Colquhoun,* (*Miss*) *Ettie Stewart* **Steele,** and (*Miss*) *Mary Isobel* **Shannon,** the constitution of polysaccharides. Part IV. Inulin, 1060.

J.

Jackman, *Douglas Norman,* and (*Miss*) *Agnes* **Browne,** the 25°-isotherms of the systems magnesium nitrate–sodium nitrate–water and magnesium sulphate–magnesium nitrate–water, 694.

Jackman, *Douglas Norman.* See also *William Edward* **Garner.**

Jenkins, *William Job.* See *James William* **McBain.**

Jones, *Edward William Taylor,* obituary notice of, 746.

Joseph, *Alfred Francis.* See (*Miss*) *Ida L.* **Millican.**

Joyner, *Reginald Arthur,* the viscosity of cellulose in cuprammonium hydroxide solution. Part I. The determination of the viscosity, 1511.

the viscosity of cellulose. Part II. The lowering of the viscosity of cellulose by various reagents, 2395.

K.

Kellner, *William,* obituary notice of, 2912.

Kenner, *James.* See *Harold* **Burton,** and *George Hallatt* **Christie.**

Kenyon, *Joseph,* a simplified method for the resolution of methyl-*n*-hexylcarbinol, 2540.

Kermack, *William Ogilvy, William Henry* **Perkin,** *jun.,* and *Robert* **Robinson,** harmine and harmaline. Part VI. The synthesis of *N*-methyltetrahydronorharmine and the constitution of harmaline and of the alkylated harmines, 1872.

Kermack, *William Ogilvy,* and *Robert* **Robinson,** an explanation of the property of induced polarity of atoms and an interpretation of the theory of partial valencies on an electronic basis, 427.

King, *Harold,* the isolation of muscarine, the potent principle of *Amanita muscaria,* 1743.

King, *Harold,* and *Albert Donald* **Palmer,** the resolution of tropic acid and the stereochemical configuration of the cinchona alkaloids, 2577.

King, *Herbert Joseph Seymour.* See *Gilbert Thomas* **Morgan.**

Knaggs, (*Miss*) *Isabel Ellie,* inorganic complex salts; crystallographic and optical study. Part I., 2069.

Kon, *George Armand Robert,* the formation and stability of *spiro*-compounds. Part VII. The application of the Dieckmann reaction to esters of the glutaric series, 513.

Kon, *George Armand Robert, Arnold* **Stevenson,** and *Jocelyn Field* **Thorpe,** ring-chain tautomerism. Part I. The occurrence and effect of keto-enol tautomerism between a ring compound and its open-chain isomeride, 650.

Kon, *George Armand Robert,* and *Jocelyn Field* **Thorpe,** a method for the preparation of $\alpha\beta\beta$-trialkylated glutaric acids, 1795.

Kon, *George Armand Robert.* See also *Frank* **Dickens.**

Krishna, *Sri,* phenolcamphorein, 253.

Krishna, *Sri,* and *Frank George* **Pope,** the action of potassium iodide and iodate on some hydroxy-acids, 798.

L.

Laing, (*Miss*) *Mary Evelyn.* See *James William* **McBain.**

Lal, *Rattan.* See *Bawa Kartar* **Singh.**

Lambourne, *Herbert,* derivatives of methylstannonic acid; their bearing upon its constitution, 2533.

Lapworth, *Arthur,* a theoretical derivation of the principle of induced alternate polarities, 416.

Lapworth, *Arthur,* and *John Alexander* **McRae,** syntheses of alkylidenecyanoacetic acids and of substituted succinic acids. Part I. Acids containing aromatic residues, 1699.

resorcinolphenylsuccinein, 2722.

syntheses of alkylidenecyanoacetic acids and of substituted succinic acids. Part II. Preparation of acids containing saturated aliphatic residues and the constitution of the aliphatic alkylidenecyanoacetic esters, 2741.

Lapworth, *Arthur,* and *John Baldwin* **Shoesmith,** reciprocal induced polarity effects in cresols and their derivatives; properties of the isomeric methoxybenzyl bromides, 1391.

Lapworth, *Arthur*. See also *Robert Downs* **Haworth**, and (*Miss*) *Lucy* **Higginbotham**.

Laschtschenko, *Porphyry Nicolaevitch*, polymorphism of arsenic, 972.

Ledbury, *Wilfrid*. See *Gilbert Thomas* **Morgan**.

Leitch, (*Miss*) *Grace Cumming*. See *Walter Norman* **Haworth**.

Lewis, *William Cudmore McCullagh*. See *Thomas* **Moran**, and *Henry Austin* **Taylor**.

Light, *Louis*, and *Frank Lee* **Pyman**, bromo-derivatives of 2-methylglyoxaline, 2626.

Ling, *Arthur Robert*, and *Dinshaw Rattonji* **Nanji**, crystalline glucose-ammonia and *iso*glucosamine, 1682.

Linstead, *Reginald Patrick*. See *Kenneth Claude Devereux* **Hickman**.

Locket, *George Hazlewood*. See *Dalziel Llewellyn* **Hammick**.

Losanitch, *Sima M.*, decomposition of dithiocarbazinates, 2542.

Lowry, *Thomas Martin*, and *John Outram* **Cutter**, the rotatory dispersive power of organic compounds. Part X. The preparation and properties of pure ethyl tartrate, 532.

Lowry, *Thomas Martin*, *Victor* **Steele**, and *Henry* **Burgess**, new halogen derivatives of camphor. Part II. α′-Bromocamphor, 633.

Lowry, *Thomas Martin*. See also *Reginald George* **Early**, and (*Miss*) *Ida L.* **Millican**.

M.

Macaulay, *Robert Milroy*, the reaction between iodine and sulphurous acid, 552.

McBain, *James William*, and *Arthur John* **Burnett**, the effect of an electrolyte on solutions of pure soap; phase-rule equilibria in the system sodium laurate–sodium chloride–water, 1320.

McBain, *James William*, and *William Job* **Jenkins**, the ultra-filtration of soap solutions; sodium oleate and potassium laurate, 2325.

McBain, *James William*, (*Miss*) *Millicent* **Taylor**, and (*Miss*) *Mary Evelyn* **Laing**, studies of the constitution of soap solutions; solutions of sodium palmitate, and the effect of excess of palmitic acid or sodium hydroxide, 621.

McBain, *James William*. See also (*Miss*) *Mabel Harriet* **Norris**.

Macbeth, *Alexander Killen*, the labile nature of the halogen atom in organic compounds. Part IV. The tautomeric hydrogen hypothesis, and the removal of the halogen atom from aromatic nitro-compounds, 1116.

Macbeth, *Alexander Killen*, and *John* **Pryde**, studies of the glucosides. Part I. The constitution of indican, 1660.

Macbeth, *Alexander Killen*, and *Robert* **Robinson**, cevadine. Part I., 1571.

Macbeth, *Alexander Killen*. See also *Ian Armstrong* **Black**, *Hugh* **Graham**, *Thomas* **Henderson**, and *Edmund Langley* **Hirst**.

McClelland, *Ernest Wilson*. See *Samuel* **Smiles**.

McCombie, *Hamilton*, *Harold Archibald* **Scarborough**, and *Richard Hardcastle* **Settle**, the velocity of reaction in mixed solvents. Part III. The influence of temperature on the velocity of saponification of esters, 2308.

McCombie, *Hamilton*. See also *Albert Eric* **Cashmore**.

Macdonald, *George William*, obituary notice of, 2913.

McHugh, *Gerald Patrick*. See *Oscar Lisle* **Brady**.

McKenzie, *Alexander*, and (*Miss*) *Isobel Agnes* **Smith**, catalytic racemisation of optically active acid amides, 1348.

McKenzie, *Alexander*, and (*Miss*) *Nellie* **Walker**, optical activation of racemic acid by *l*-malic acid, 349.

Mackenzie, *John Edwin*, the action of sodium methoxide and its homologues on benzophenone chloride and benzylidene chloride. Part III., 1695.

McRae, *John Alexander*. See *Arthur* **Lapworth**.

Maltby, *John Gwilliam*, optical rotations of the sugars. Part I. The aldohexoses and aldopentoses, 2608.

Manley, *John Job*, the use as a drying agent of phosphoric oxide treated with ozone, 331.

Mann, *Frederick George*, the interaction of aniline and acraldehyde, 2178.

Mann, *Frederick George*, and (*Sir*) *William Jackson* **Pope**, production and reactions of ββ′-dichlorodiethyl sulphide, 594.

the sulphilimines, a new class of organic compounds containing quadrivalent sulphur, 1052.

the β-chlorovinylarsines, 1754.

Mansuri, *Qasim Ali*, intermetallic actions; the system aluminium–arsenic, 2272.

Mason, *Walter*, and *Richard Vernon* **Wheeler,** the ignition of gases. Part II. Ignition by a heated surface; mixtures of methane and air, 2079.

Masson, *James Irvine Orme.* See *Lionel Felix* **Gilbert.**

Masters, (*Miss*) *Helen*, reactions of cellulose with sodium chloride and other neutral salt solutions. Part I. Preliminary survey, 2026.

Matsuno, *Kichimatsu.* See *William Edward* **Garner.**

Maxted, *Edward Bradford*, catalysis of hydrogen peroxide by finely divided platinum; the influence of inhibitants, 1760.

Menzies, *Robert Charles*, γ-methylfructoside, 2238.

the purification of methyl alcohol by means of sodium hypochlorite, 2787.

Millican, (*Miss*) *Ida L.*, *Alfred Francis* **Joseph,** and *Thomas Martin* **Lowry,** the properties of ammonium nitrate. Part II. Ammonium nitrate and water, 959.

Mills, *William Hobson*, the cyanine dyes. Part IV. Cyanine dyes of the benzothiazole series, 455.

Mills, *William Hobson*, and *Walter Theodore Karl* **Braunholtz,** the cyanine dyes. Part V. The virtual tautomerism of the thiocyanines, 1489.

Mills, *William Hobson*, and (*Miss*) *Frances Mary* **Hamer,** the quaternary salts of quinaldinic acid, 2008.

Mills, *William Hobson*, and (*Sir*) *William Jackson* **Pope,** 2-*p*-dimethylaminostyrylpyridine methiodide, a new photographic sensitiser, 946.

Mills, *William Hobson*, and *James Leonard Brierley* **Smith,** the reactivity of methyl groups in heterocyclic bases, 2724.

Mills, *William Hobson.* See also *Walter Karl Theodore* **Braunholtz.**

Minton, *Thomas Hooker*, and *Henry* **Stephen,** preparation of *o*-, *m*-, and *p*-nitrophenoxyacetic acids and various nitrotolyloxyacetic acids and their derivatives, 1591.

studies in the coumaranone series. Part II. The preparation of 4- and 6-chlorocoumaran-2-ones and their conversion into 2- and 4-chloroflavonols respectively, and some derivatives of *o*- and *p*-chlorophenoxyacetic acids, 1598.

Mitchell, *Alec Duncan*, studies on hypophosphorous acid. Part IV. Its reaction with cupric chloride, 1624.

Moir, *James*, the calculation of the colour of the azo-dyes and related coloured substances, 1555.

the mathematics of the dicyclic colour theory, and a new theory of the structure of the nitrogen atom, 1808.

Mond, *Robert Ludwig*, and *Albert Edward* **Wallis,** researches on the metallic carbonyls, 29.

the action of nitric oxide on the metallic carbonyls, 32.

Monro, *Alexander Donald*, the isotope ratio of New Zealand boron, 986.

Moran, *Thomas*, and *William Cudmore McCullagh* **Lewis,** studies in catalysis. Part XVI. The inversion of sucrose by hydrogen ion, 1613.

Morgan, *Gilbert Thomas*, *Harry Dugald Keith* **Drew,** and *Thomas Vipond* **Barker,** researches on residual affinity and co-ordination. Part XI. Interaction of selenium tetrachloride and β-diketones, 2432.

Morgan, *Gilbert Thomas*, and *Harry Dugald Keith* **Drew** [with *E. A.* **Cooper**], researches on residual affinity and co-ordination. Part VIII. Interaction of tellurium tetrachloride and β-diketones, 922.

Morgan, *Gilbert Thomas*, and *Herbert Joseph Seymour* **King,** researches on residual affinity and co-ordination. Part IX. Cobaltammine salts of the nitro-dyes, 1723.

Morgan, *Gilbert Thomas*, and *Wilfrid* **Ledbury,** researches on residual affinity and co-ordination. Part XIV. Interactions of metallic salts and dimethyldithiolethylene, 2882.

Morgan, *Gilbert Thomas*, and *John Ewart* **Moss,** researches on residual affinity and co-ordination. Part XII. Cobaltammine and ferric lakes of dinitrosoresorcinol, 2857.

Morgan, *Gilbert Thomas*, and *Hugh Norman* **Read,** the diazo-reaction in the carbazole series; carbazole-3-diazoimine and -3-diazonium salts, 2709.

Morgan, *Gilbert Thomas*, and *Harry Gordon* **Reeves,** azomethine derivatives of the 2- and 4-hydroxy-α-naphthaldehydes, 1.

Morgan, *Gilbert Thomas*, and *John David Main* **Smith,** researches on residual affinity and co-ordination. Part VII. Cobaltic lakes of the alizarin series, 160.

researches on residual affinity and co-ordination. Part X. Salicylatotetramminocobaltic salts and the constitution of oxonium compounds, 1956.

Morgan, *Gilbert Thomas*, and *John David Main* **Smith**, researches on residual affinity and co-ordination. Part XIII. Cobaltammine and chromic lakes of the azo-salicylic acids, 2866.

Moss, *John Ewart*. See *Gilbert Thomas* **Morgan**.

Moudgill, *Kishori Lal*, 2 : 8-tetramethyldiaminoacridine, 1506.
brominated *iso*cyanines, 1509.

Mukerji, *Dhirendra Nath*, colouring matters from 1 : 2 : 4 : 5-tetrahydroxybenzene and related substances, 545.
vat dyes of the azo-series, 2879.

N.

Naik, *Kuverji Gosai*, and *Mahadeo Dattatraya* **Avasare**, the formation and properties of dithioketones ($R_2C:S_2:S$) and dithio-ethers ($R_2S:S$). Part III., 2592.

Nanji, *Dinshaw Rattonji*. See *Arthur Robert* **Ling**.

Newbery, *Edgar*, the overvoltage of the mercury cathode, 7.

Nickelson, *Stanley Arthur*. See *Sidney Hartley* **Bales**.

Nickolls, *Lewis Charles*. See *Christopher Kelk* **Ingold**.

Nierenstein, *Maximilian*, catechutannins. Part I. Paullinia tannin, 23.
the constitution of catechin. Part IV., 604.

Nishikawa, *Hidejiro*, and *Robert* **Robinson**, the hydroxybenzoylphloroglucinols, 839.

Norris, (*Miss*) *Mabel Harriet* [with (*Miss*) *D. H.* **Falkner** and (*Miss*) *M. C.* **Price**], the constitution of soap solutions; hexadecanesulphonic (cetylsulphonic) acid and other sulphonates, 2161.

Norris, (*Miss*) *Mabel Harriet*, and *James William* **McBain**, a study of the rate of saponification of oils and fats by aqueous alkali under various conditions, 1362.

P.

Palmer, *Albert Donald*. See *Harold* **King**.

Parker, *William Bayley*, and *Gertha* **Thompson**, the variation of refractive index and density of benzene with temperature, 1341.

Parkes, *Deric William*. See *Frederick Daniel* **Chattaway**.

Partington, *James Riddick*. See *Frank Ward* **Bury**.

Patterson, *Jocelyn*. See *James Colquhoun* **Irvine**.

Patterson, *Thomas Stewart*, a property of ethyl tartrate, 1042.

Payman, *William*, and *Richard Vernon* **Wheeler**, the combustion of complex gaseous mixtures, 363.

Penfold, *Arthur Ramon*, a critical examination of the aromatic aldehydes occurring in certain eucalyptus oils, 266.

Perkin, *Arthur George*, and *George Douglas* **Spencer**, some reactions of benzanthrone, 474.

Perkin, *Arthur George*, and *Yoshisuke* **Uyeda**, occurrence of a crystalline tannin in the leaves of the *Acer ginnala*, 66.

Perkin, *Arthur George*, and *Thomas William* **Whattam**, some products of the reduction of 2-hydroxyanthraquinone, 289.

Perkin, *Arthur George*. See also *Geoffrey Gordon* **Bradshaw**.

Perkin, *William Henry, jun.*, and *Alan Francis* **Titley**, conditions of formation of rings attached to the *o*-, *m*-, and *p*-positions of the benzene nucleus. Part I. The action of sodium on *o*-phenylenediacetic ester, 1562.

Perkin, *William Henry, jun.* See also *George Roger* **Clemo**, *William* **Davies**, and *William Ogilvie* **Kermack**.

Perman, *Edgar Philip*, the properties of ammonium nitrate. Part IV. The reciprocal salt-pair, ammonium nitrate and sodium chloride, 2473.

Perren, *Edward Arthur*. See *Christopher Kelk* **Ingold**.

Peto, *Raymond Harold Kelsall*. See *George Ingle* **Finch**.

Piggott, *Henry Alfred*. See *Christopher Kelk* **Ingold**.

Pinkard, *Frederic William*, and *William* **Wardlaw**, the action of sulphur on cuprous chloride, 1300.

Pinkard, *Frederic William*. See also *William* **Wardlaw**.

Pope, *Frank George*. See *Sri* **Krishna**.

Pope, *John Clifford*. See *Francis Ernest* **Francis**.

Pope, (*Sir*) *William Jackson*, and *James Leonard Brierley* **Smith**, the chlorinated dialkyl sulphides, 1166.

Pope, (*Sir*) *William Jackson*. See also *John Edmund Guy* **Harris**, *Frederick George* **Mann**, and *William Hobson* **Mills**.

Pound, *James Robert*, properties of mixtures of ethyl ether, sulphuric acid, and water, 941.

Pratt, *David Doig,* and *Robert* **Robinson,** a synthesis of pyrylium salts of anthocyanidin type, 1577.
Price, (*Miss*) *M. C.* See (*Miss*) *Mabel Harriet* **Norris.**
Pryde, *John.* See *Alexander Killen* **Macbeth.**
Pushin, *Nicolai Antonovich,* and *Alexandra* **Fioletova,** the equilibrium in the system *m*-dinitrobenzene–urethane, 1822.
Pushin, *Nicolai Antonovich,* and *Alexandra Alexandrovna* **Glagoleva,** the equilibrium in systems composed of water and alcohols; methyl alcohol, pinacone, glycerol, and erythritol, 2813.
Pyman, *Frank Lee,* orientation of the 1:4- and 1:5-dimethylglyoxalines; mode of fission of 5-aminoglyoxalines, 2616.
Pyman, *Frank Lee.* See also *Isidore Elkanah* **Balaban,** and *Louis* **Light.**

R.

Rai, *Raghunath.* See *Bawa Kartar* **Singh.**
Rau, *Madyar Gopal.* See *John Lionel* **Simonsen.**
Rawling, *Sidney Owen,* and *Walter* **Clark,** the isoelectric condition of gelatin, 2830.
Rây, (*Sir*) *Prafulla Chandra,* triethylene tri- and tetra-sulphides. Part II., 1279.
Rây, (*Sir*) *Prafulla Chandra,* and *Radhakishen* **Das,** chloropicrin as a reagent for the diagnosis of mercaptans and potential mercaptans, 323.
Rây, *Priyadaranjan,* and *Pulin Vihari* **Sarkar,** formation and dissociation of some polyhalogen compounds of hydrogen in aqueous solution, 1449.
Ray, *Rames Chandra,* the potassium salt of hexahydrodioxydiboron, 1088.
Read, *Hugh Norman.* See *Gilbert Thomas* **Morgan.**
Read, *John,* and *Eric* **Hurst,** the conversion of allyl alcohol to glyceryl chloro- and bromo-hydrins, 989.
the action of bromine water on indene, 2550.
Read, *John,* and *Henry George* **Smith,** piperitone. Part II. Benzylidene-*dl*-piperitone, 574.
piperitone. Part IV. The interaction of *dl*-piperitone and semicarbazide, and the isolation of pure *dl*-piperitone, 1863.
Read, *John, Henry George* **Smith,** and (*Miss*) *Marie* **Bentivoglio,** piperitone. Part III. The oximes of *dl*-piperitone, 582.
Reeves, *Harry Gordon.* See *Gilbert Thomas* **Morgan.**
Reid, *Robert Douglas.* See *Malcolm Percival* **Applebey.**
Reilly, (*Miss*) *Amy Ada Beatrice.* See *John Norman* **Collie.**
Rendall, *Arthur Geoffrey,* and (*Miss*) *Martha Annie* **Whiteley,** the oxime of mesoxamide (*iso*nitrosomalonamide) and some allied compounds. Part IV. The ethers of *iso*nitrosomalonanilide, *iso*nitrosomalondimethylamide, and *iso*nitrosomalondibenzylamide, 2110.
Report of the Council, 722.
Rideal, *Eric Keightley,* the hydrogenation of ethylene in contact with nickel, 309.
Rideal, *Eric Keightley,* and *William* **Thomas,** the autoracemisation of potassium chromioxalate, 196.
adsorption and catalysis in fuller's earth, 2119.
Ridgway, *Leslie Randal.* See *Frederick* **Challenger.**
Riley, *George Clifford.* See *Edward* **Hope.**
Rivett, *Albert Cherbury David,* the quaternary system ammonium chloride–sodium sulphate–ammonium sulphate–sodium chloride–water, 379.
Robertson, *John McGregor.* See *George Gerald* **Henderson.**
Robinson, *Robert.* See *James Wilson* **Armit,** *Herbert Grace* **Crabtree,** *Herbert* **Greene,** *William Ogilvy* **Kermack,** *Alexander Killen* **Macbeth,** *Hidejiro* **Nishikawa,** *David Doig* **Pratt,** and *James* **Scott.**
Rolt, *William Joseph Woodgate.* See *Oscar Lisle* **Brady.**
Rowe, *Frederick Maurice,* and *John Stanley Herbert* **Davies,** studies in the dihydronaphthalene series. Part III. The oxidation and bromination of 5:8-dihydro-α-naphthylamine, 1000.
Rutherford, (*Sir*) *Ernest,* artificial disintegration of the elements, 400.

S.

Saha, *Haridas,* and *Kumud Nath* **Choudhury,** capsularin, a glucoside from jute leaf, 1044.
Salmon, *Cyril Sebastian,* note on the effect of electrolytes on the constitution of soap solutions, as deduced from electromotive force, 711.

Salway, *Arthur Henry*, and *Percy Noel* **Williams**, the catalytic oxidation of saturated paraffin hydrocarbons and fatty acids, 1343.

Sarkar, *Pulin Vihari*. See *Priyadaranjan* **Rây**.

Sato, *Shinichi*. See *Christopher Kelk* **Ingold**.

Saunders, *Horace Leonard*, the decomposition of ammonium nitrate by heat, 698.

Saunders, *Kenneth Herbert*, esters of the hydroxyalkylarylamines. Part I. Acid sulphuric esters of the simple monohydroxyethylarylamines, 2667.

Saville, *William Bristow*. See *Martin Onslow* **Forster**.

Scarborough, *Harold Archibald*. See *Albert Eric* **Cashmore**, and *Hamilton* **McCombie**.

Scott, *James*, and *Robert* **Robinson**, note on 2:3- and 2:5-dinitro-*p*-toluidines, 844.

Scott, *John Richard*, and *Julius Berend* **Cohen**, the condensation of aromatic *o*-aminosulphonic acids with *iso*cyanic acid, 2034.

Sen, *Nirmal Kumar*. See *Sikhibhushan* **Dutt**.

Sen-Gupta, *Hemendra Kumar*, and *Stanley Horwood* **Tucker**, the oxidation of α-dinaphthaxanthens, 557.

Settle, *Richard Hardcastle*. See *Hamilton* **McCombie**.

Shannon, (*Miss*) *Mary Isobel*. See *James Colquhoun* **Irvine**.

Sharp, *Thomas Marvel*. See *Thomas Anderson* **Henry**.

Sheldon, *Wilfrid*. See *Edward* **Hope**.

Shimomura, *Akira*, and *Julius Berend* **Cohen**, the interchange of alcohol radicles and esters. Parts I. and II., 883, 2051.

Shoesmith, *John Baldwin*. See *Arthur* **Lapworth**.

Short, *Wallace Frank*, and *John Charles* **Smith**, the condensation of phenols with the hydrochlorides of cyanamides and carbodi-imides, and its relation to the Hoesch reaction, 1803.

Sidgwick, *Nevil Vincent*, and *Herbert* **Clayton**, the solubility of the aldehydobenzoic acids, 2263.

Sidgwick, *Nevil Vincent*, and *Wilfred Marsden* **Dash**, the solubility and volatility of the nitrobenzaldehydes, 2586.

Sidgwick, *Nevil Vincent*, and (*Miss*) *Elinor Katharine* **Ewbank**, the solubility of the alkali salts of benzoic and the hydroxybenzoic acids in water, 1844.

Sidgwick, *Nevil Vincent*, and *Joseph Alfred Hector Roberts* **Gentle**, the solubilities of the alkali formates and acetates in water, 1837.

Sidgwick, *Nevil Vincent*, and *Thomas Weston Johns* **Taylor**, the solubility and volatility of 3:5-dinitrophenol, 1853.

Sidgwick, *Nevil Vincent*, and *Sydney Leonard* **Turner**, the solubility of the chlorophenols, 2256.

Silberrad, *Oswald*, researches on sulphuryl chloride. Part II. A new chlorinating agent; preparation of polychloro-derivatives of benzene, 1015.

Simonsen, *John Lionel*, the constitution of the terpene present in the essential oil from *Andropogon Jwarancusa*, Jones, 2292.

Simonsen, *John Lionel*, and *Madyar Gopal* **Rau**, the essential oil from *Blumea Malcomii*, 876.

Simpson, *Charles*. See (*Miss*) *Lucy* **Higginbotham**.

Singh, *Bawa Kartar*, *Raghunath* **Rai**, and *Rattan* **Lal**, studies in optically active dyes. Part I. Camphoreins, 1421.

Singh, *Gopal*, phototropy of inorganic salts; cuprous chloride and bromide, 782.

Sircar, *Anukul Chandra*, and *Sikhibhushan* **Dutt**, dyes derived from camphoric anhydride, 1283.

dyes derived from phenanthraquinone. Part I. Phenanthranaphthazines, 1944.

Smiles, *Samuel*, and *Hugh* **Graham**, derivatives of diphenylthiolbenzene, 2506.

Smiles, *Samuel*, and *Douglas Creese* **Harrison**, *p*-dithiobenzoic acid, 2022.

Smiles, *Samuel*, and *Ernest Wilson* **McClelland**, the interaction of aromatic disulphides and sulphuric acid, 86.

Smith, *Frederick William*. See *Thomas James* **Drakeley**.

Smith, *Henry George*. See *John* **Read**.

Smith, (*Miss*) *Isobel Agnes*. See *Alexander* **McKenzie**.

Smith, *John Charles*. See *Wallace Frank* **Short**.

Smith, *John David Main*. See *Gilbert Thomas* **Morgan**.

Smith, *James Leonard Brierley*. See *William Hobson* **Mills**, and (*Sir*) *William Jackson* **Pope**.

Smithells, *Colin James*. See **General Electric Co., Ltd**.

Smythe, *John Armstrong*, use of iron pyrites in a Friedel-Crafts' reaction, 1270.

Smythe, *John Armstrong*, decomposition of benzyl disulphoxide, 1400.
Spencer, *George Douglas.* See *Arthur George* **Perkin.**
Spiller, *John*, obituary notice of, 748.
Stansell, *Lionel William*, obituary notice of, 2916.
Steele, (*Miss*) *Ettie Stewart.* See *James Colquhoun* **Irvine.**
Steele, *Victor.* See *Thomas Martin* **Lowry.**
Stephen, *Henry.* See *Thomas Hosker* **Minton.**
Stevenson, *Arnold*, and *Jocelyn Field* **Thorpe**, the formation of derivatives of tetrahydronaphthalene from γ-phenyl fatty acids. Part II., 1717.
Stevenson, *Arnold.* See also *George Armand Robert* **Kon.**
Stewart, (*Miss*) *Jessie*, aromatic sulphonyl chlorides, 2555.
Stewart, *Lachlan Macquarie*, and *William* **Wardlaw**, the oxidising and reducing properties of sulphur dioxide. Part I. Mercury chlorides, 1481.
Sugden, *Samuel*, the determination of surface tension from the maximum pressure in bubbles, 858.
Swan, *Enoch.* See *Fred* **Fairbrother.**

T.

Taffel, *Alan*, thermal expansion of gelatin gels, 1971.
Taylor, *Henry Austin*, and *William Cudmore McCullagh* **Lewis**, studies in catalysis. Part XV. Absorption spectra of triethylsulphonium bromide in various solvents, in the short infra-red region, 665.
Taylor, *John*, the interaction of aldehydes or ketones and thiocarbamides in the presence of acids. Part II., 2269.
Taylor, (*Miss*) *Millicent.* See *Oriel Joyce* **Flecker**, and *James William* **McBain.**
Taylor, *Thomas Weston Johns.* See *Nevil Vincent* **Sidgwick.**
Thomas, *Clifford Dane.* See *Oscar Lisle* **Brady.**
Thomas, *William.* See *Eric Keightley* **Rideal.**
Thompson, *Gartha.* See *William Bayley* **Parker.**
Thompson, *Hugh Vernon.* See *Francis Herbert* **Clews.**
Thorpe, *Jocelyn Field.* See *Oscar* **Becker**, *Stanley Francis* **Birch**, *Juan Pedige Charles* **Chandrasena**, *Shankar Shridhar* **Deshapande**, *Frank* **Dickens**, *Ernest Harold* **Farmer**, *Biraj Mohan* **Gupta**, *Christopher Kelk* **Ingold**, *George Armand Robert* **Kon**, and *Arnold* **Stevenson.**
Tideswell, *Frederick Vincent*, and *Richard Vernon* **Wheeler**, on dopplerite; studies in the composition of coal, 2345.
Tingey, *Harold Calvert*, and *Cyril Norman* **Hinshelwood**, the catalytic decomposition of formic acid on surfaces of platinum and silver, 1668.
Titley, *Alan Francis.* See *William Henry* **Perkin**, *jun.*
Tucker, *Stanley Horwood.* See *Hemendra Kumar* **Sen-Gupta.**
Turner, *Sydney Leonard.* See *Nevil Vincent* **Sidgwick.**

U.

Usherwood, (*Miss*) *Edith Hilda*, tautomerism of dyads. Part I. Detection of tautomeric equilibria in hydrocyanic acid, 1604.
Usherwood, (*Miss*) *Edith Hilda.* See also *Christopher Kelk* **Ingold.**
Uyeda, *Yoshisuke.* See *Arthur George* **Perkin.**

V.

Vallance, *Reece Henry.* See *John Albert Newton* **Friend.**
Venkateswaran, *Ramavenkatasubba*, the molecular scattering of light in *n*-pentane, 2655.

W.

Walker, (*Sir*) *James*, the rôle of the physicist in the development of chemical theory, 735.
Walker, (*Miss*) *Nellie.* See *Alexander* **McKenzie.**
Wallington, *Reginald Wilfred.* See *Francis Ernest* **Francis.**
Wallis, *Albert Edward.* See *Robert Ludwig* **Mond.**
Ward, *Charles Frederick*, the bromination of acids in the α-position, 1161.
Ward, *James Bertram.* See *Archibald Edwin* **Goddard.**
Wardlaw, *William*, and *Frederic William* **Pinkard**, the oxidising properties of sulphur dioxide. Part III. Copper chlorides, 210.
Wardlaw, *William.* See also *Frederic William* **Pinkard**, and *Lachlan Macquarie* **Stewart.**
Wark, *Ian William*, a rapid iodometric estimation of copper and iron in mixtures of their salts, 358.

Watkins, *Cyril Mercer.* See *Francis Ernest* **Francis.**

Watson, *Edwin Roy,* and *Sikhibhushan* **Dutt,** attempts to prepare red sulphide dyes. Part I., 1939.

attempts to prepare red sulphide dyes. Part II. Mercaptan derivatives of azo-dyes, 2414.

Wayne, *Edward Johnson,* and *Julius Berend* **Cohen,** the aldehydosalicylic acids and their derivatives, 1022.

Werner, *Emile Alphonse,* the constitution of carbamides. Part XIV. The decomposition of urea by sodium hypobromite in alkaline solution, and an improved procedure for the estimation of urea by this means, 2318.

Werner, *Emile Alphonse,* and *James* **Bell,** the preparation of methylguanidine and of $\beta\beta$-dimethylguanidine by the interaction of dicyanodiamide, and methylammonium and dimethylammonium chlorides respectively, 1790.

West, *Ralph Winton,* quantitative reduction by hydriodic acid of halogenated malonyl derivatives. Part II. The *s*-tetra-substituted amides of bromo- and chloro-malonic acids, 2196.

Weston, *Arnold,* the quaternary system potassium sulphate–magnesium sulphate–ammonium sulphate–water, 1223.

Whattam, *Thomas William.* See *Arthur George* **Perkin.**

Wheeler, *Richard Vernon.* See *Walter* **Mason,** *William* **Payman,** and *Frederick Vincent* **Tideswell.**

White, *Albert Greville,* limits for the propagation of flame in vapour–air mixtures. Part I. Mixtures of air and one vapour at the ordinary temperature and pressure, 1244.

White, *Albert Greville,* limits for the propagation of flame at various temperatures in mixtures of ammonia with air and oxygen, 1688.

limits for the propagation of flame in vapour–air mixtures. Part II. Mixtures of more than one vapour and air at the ordinary temperature and pressure, 2561.

Whiteley, (*Miss*) *Martha Annie.* See *Arthur Geoffrey* **Rendall.**

Wilkes, *Sydney Herbert.* See *Malcolm Percival* **Applebey.**

Wilkinson, *John Frederick.* See *Frederick* **Challenger.**

Williams, *Percy Noel.* See *Arthur Henry* **Salway.**

Williams, *William Dudley.* See *Leonard Eric* **Hinkel.**

Wilson, *Daniel.* See *Christopher Kelk* **Ingold.**

Wilson, *Forsyth James,* and *Robert* **Burns,** reactions of thiosemicarbazones. Part I. Action of halogen compounds, 870.

Wilson, *Forsyth James, Isaac Vance* **Hopper,** and *Archibald Barclay* **Crawford,** the action of amines on semicarbazones. Part I. Preparation of an optically active semicarbazide, 866.

Wood, *John Kerfoot.* See *George Ernest* **Collins.**

Wright, *Robert,* determination of the molecular weight of substances in alcoholic solution from the elevation of the flash point, 2247.

selective solvent action by the constituents of aqueous alcohol, 2251

INDEX OF SUBJECTS.

TRANSACTIONS. 1922.

Single organic compounds of known empirical formula will be found in the Formula Index, p. 2947.

A.

Acer ginnala (Korean maple), crystalline tannin in the leaves of (PERKIN and UYEDA), 66.

Aceritol, $C_6H_{12}O_5$.

Acertannin, $C_{20}H_{20}O_{13}$.

Acetals, preparation of (HAWORTH and LAPWORTH), 76.

Acetylacetones, metallic (MORGAN, DREW, and BARKER), 2433.

Acids, fatty, catalytic oxidation of (SALWAY and WILLIAMS), 1343.
organic, bromination of, in the α-position (WARD), 1161.
αβ-unsaturated, esters of, formation of substituted succinic acids from (HIGGINBOTHAM and LAPWORTH), 49.

Address, presidential (WALKER), 735.

Adsorption of saturated vapours by charcoal (DRIVER and FIRTH), 2409.
by fuller's earth (RIDEAL and THOMAS), 2119.

Affinity, residual, and co-ordination (MORGAN and SMITH), 160, 1956, 2866; (MORGAN and DREW), 922; (MORGAN and KING), 1723; (MORGAN, DREW, and BARKER), 2432; (MORGAN and MOSS), 2857; (MORGAN and LEDBURY), 2882.

Alcohols, introduction of the chloroethyl group into (CLEMO and PERKIN), 642.

Aldehydes, conversion of, into acetals (HAWORTH and LAPWORTH), 76.
interaction of thiocarbamides and (TAYLOR), 2267.
aromatic, in eucalyptus oils (PENFOLD), 266.

Alizarin colouring matters, cobalt derivatives of (MORGAN and SMITH), 160.

Alkali hydrogen sulphites, equilibria of, in aqueous solutions (BALY and BAILEY), 1813.

Alkaloids, cinchona. See Cinchona.

Alkyl iodides, reactivity of, with sodium benzyloxide (HAYWOOD), 1904.

Alkylarylamines, hydroxy-, esters of (SAUNDERS), 2667.

Alkylhydrazones (BRADY and MCHUGH), 1648.

Alkylidenecyanoacetic acids, syntheses of (LAPWORTH and MCRAE), 1699, 2741.

Alloys, formation of (MANSURI), 2272.

Aluminioxalic acid, $C_6H_3O_{12}Al$.

Aluminium alloys with arsenic (MANSURI), 2272.

Aluminium sulphate, equilibrium of potassium sulphate, water, and (BRITTON), 982.
chlorosulphoxide and sulphur chloride (SILBERRAD), 1017.

Amanita muscaria, isolation of muscarine from (KING), 1743.

Amides, acid optically active, catalytic racemisation of (MCKENZIE and SMITH), 1348.

Amines, action of, on semicarbazones (WILSON, HOPPER, and CRAWFORD), 866.
hydroferricyanides and hydroferrocyanides of (CUMMING), 1287.

Amino-compounds, introduction of the chloroethyl group into (CLEMO and PERKIN), 642.

Ammines, complex metallic (DUFF), 450.

Ammonia, reactivity of (BALY and DUNCAN), 1008.
ignition of mixtures of, with air and oxygen (WHITE), 1688.
action of, on copper (BASSETT and DURRANT), 2630.

Ammonium chloride, equilibrium in the systems of, with water and cobaltous, ferrous, or nickel chloride (CLENDINNEN), 801.
chloride and sulphate, equilibrium of, with sodium chloride and sulphate and water (RIVETT), 379.
diamminotetranitrocobaltiate (KNAGGS) 2078.

Ammonium nitrate, properties of (MILLICAN, JOSEPH, and LOWRY), 959; (EARLY and LOWRY), 963; (PERMAN), 2473.
decomposition of, by heat (SAUNDERS), 698.
action of, on copper (BASSETT and DURRANT), 2630.
sulphate, equilibrium of glucinum sulphate, water, and (BRITTON), 2612.
equilibrium of magnesium and potassium sulphates, water, and (WESTON), 1223.
Ammonium organic compounds, quaternary, influence of solvents on the velocity of formation of (HAWKINS), 1170.
Amygdalin, $C_{20}H_{27}O_{11}N$.
Amylases of cereals (BAKER and HULTON), 1929.
Andropogon Jwarancusa, terpene from the essential oil of (SIMONSEN), 2292.
Annual General Meeting, 722.
Anthracene series, studies in the (BARNETT and COOK), 1376; (BARNETT, COOK, and GRAINGER), 2059.
Anthraquinone, 2-hydroxy-, $C_{14}H_8O_3$.
Aromadendral, true nature of (PENFOLD), 266.
Aromadendrin, constitution of (NISHIKAWA and ROBINSON), 839.
Aromatic compounds, polynuclear, molecular configuration of (CHRISTIE and KENNER), 614.
heterocyclic (ARMIT and ROBINSON), 827.
Arsenic, polymorphism of (LASCHTSCHENKO), 972.
Arsenic alloys with aluminium (MANSURI), 2272.
Arsenic organic compounds (MANN and POPE), 1754.
Atmospheric air, propagation of flame in mixtures of gases with (PAYMAN and WHEELER), 363; (WHITE), 1244, 1688, 2561.
ignition of mixtures of methane and (MASON and WHEELER), 2079.
Atoms, induced polarity of (LAPWORTH), 416; (KERMACK and ROBINSON), 427.
Atrolactinamide, $C_9H_{11}O_2N$.
Azelaic acid, $C_9H_{16}O_4$.
Azo-colouring matters, calculation of the colour of (MOIR), 1555.
vat (MUKERJI), 2879.
Azomethine compounds (MORGAN and REEVES), 1.

B.

Balance sheets of the Chemical Society and of the Research Fund. See Annual General Meeting, 722.
Barley, amylase of (BAKER and HULTON), 1929.
Bases, heterocyclic, reactivity of methyl groups in (MILLS and SMITH), 2724.
Behenic acid, $C_{22}H_{44}O_2$.
Benzanthrone derivatives (BRADSHAW and PERKIN), 911.
m-a-**Benzbispyrrole**, 2:6-*di*hydroxy-, $C_{10}H_8O_2N_2$.
Benzbisthiazoles (EDGE), 772.
Benzene nucleus, structure of the (INGOLD), 1133, 1143.
substitution in the (DAVIES), 806.
influence of the chlorine atom and the methyl and sulphonyl chloride groups on substitution in the (DAVIES), 785.
influence of nitro-groups on the reactivity of substituents in the (BURTON and KENNER), 489, 675.
formation of rings attached to the (PERKIN and TITLEY), 1562.
derivatives, action of sulphuryl chloride on (DURRANS), 44.
Benzenedi-*m*-thiobenzoic acid, $C_{20}H_{14}O_4S_2$.
Benzenesulphamphthalein, *tetra*hydroxy-, $C_{19}H_{13}O_9NS$.
Benzochloroamides, preparation and properties of (ELLIOTT), 202.
Benzoic acid, *p*-*di*thio-. See *p*-Disulphidobenzoic acid.
Benzoic acids, substituted, ethyl esters, velocity of saponification of (CASHMORE, MCCOMBIE, and SCARBOROUGH), 243.
Benzophenone chloride, $C_{13}H_{10}Cl_2$.
Benzothiazole series, cyanine dyes of the (MILLS), 455.
Benzyolacetones, selenium (MORGAN, DREW, and BARKER), 2453.
Beryllium. See Glucinum.
Bismuth *tri*chloride, action of diazonium chlorides with (CHALLENGER and WILKINSON), 102.
Bismuth organic compounds (CHALLENGER and WILKINSON), 91; (CHALLENGER and RIDGWAY), 104.
action of thallic chloride on (D. and A. E. GODDARD), 260.
Bismuthines, tertiary aromatic (CHALLENGER and WILKINSON), 91; (CHALLENGER and RIDGWAY), 104.
Bisulphites. See Sulphites under Sulphur.
Blumea Malcomii, essential oil from (SIMONSEN and RAU), 876.

Boron, New Zealand, isotopes of (MONRO), 986.
Boric acid, and its salts, complex compounds of, with fructose and with mannitol (GILMOUR), 1333.
Hexahydrodioxydiboron, potassium salt (RAY), 1088.
*iso***Brazilein**, $C_{16}H_{12}O_5$.
Bromination of organic acids (WARD), 1161.
Bromine water, action of, on indene (READ and HURST), 2550.
Bromine organic compounds, preparation of, without production of hydrogen bromide (GUPTA and THORPE), 1896.
Brucine, $C_{23}H_{26}O_4N_2$.

C.

α-Campholytic acid, $C_9H_{14}O_2$.
Camphoreins (SINGH, RAI, and LAL), 1421.
Capsularin, $C_{22}H_{36}O_8$.
Carbamides, constitution of (WERNER), 2318.
thio-. See Thiocarbamides.
Carbazinic acid, *di*thio-, $CH_4N_2S_2$.
Carbazole series, diazo-reaction in the (MORGAN and READ), 2709.
Carbinols, optically active, lubricating power of (DOUBLEDAY), 2875.
Carbocyanines, isomeric (BRAUNHOLTZ), 169.
Carbodi-imides, condensation of hydrochlorides of, with phenols (SHORT and SMITH), 1803.
Carbon, reaction between nitrogen, sodium carbonate, and (INGOLD and WILSON), 2278.
*di*oxide, rate of evolution of, from solution in presence of colloids (FINDLAY and HOWELL), 1046.
*di*sulphide, action of, with thallous β-diketones (MORGAN and LEDBURY), 2892.
Carbonyl chloride, adsorption of, by beechwood charcoal (BUNBURY), 1525.
Carbonyls, metallic (MOND and WALLIS), 29.
action of nitric oxide on (MOND and WALLIS), 32.
Castela Nicholsoni, castelin from (BOSMAN), 969.
Castelagenin, $C_9H_{12}O_3$.
Castelamarin (BOSMAN), 970.
Castelin, $C_{15}H_{22}O_8$.
Catalysis, studies in (TAYLOR and LEWIS), 665; (MORAN and LEWIS), 1613.
rôle of protective colloids in (IREDALE), 1536.
in fuller's earth (RIDEAL and THOMAS), 2119.
Catalysis by ions, effect of a magnetic field on, in presence of a paramagnetic salt (GARNER and JACKMAN), 1298.
Catalytic hydrogenation with reduced nickel (RIDEAL), 309.
Catechin, $C_{15}H_{14}O_6$.
Catecholcamphorein, $C_{22}H_{24}O_6$.
Catecholsulphamphthalein, $C_{19}H_{13}O_5NS$.
Catechutannins (NIERENSTEIN), 23.
Cathodes, mercury, overvoltage at (NEWBERY), 7.
Cellulose, viscosity of (JOYNER), 1511, 2395.
reactions of, with sodium chloride and neutral salt solutions (MASTERS), 2026.
cotton, glucose from (IRVINE and HIRST), 1585.
Cevadine, $C_{32}H_{49}O_9N$.
Cevine, $C_{27}H_{43}O_8N$.
Charcoal, adsorption of saturated vapours by (DRIVER and FIRTH), 2409.
beechwood, adsorption of carbonyl chloride by (BUNBURY), 1525.
Chemical constitution in relation to lubricating power (DOUBLEDAY), 2875.
theory, rôle of the physicist in development of (WALKER), 735.
Chlorination with sulphuryl chloride (SILBERRAD), 1015.
Chromioxalic acid, $C_6H_3O_{12}Cr$.
Chromium *tri*oxide, equilibrium of sulphur trioxide, water, and (GILBERT, BUCKLEY, and MASSON), 1934.
Chromium organic compounds:—
Chromic salts with azosalicylic acids (MORGAN and SMITH), 2866.
Cinchona alkaloids, stereochemistry of (KING and PALMER), 2577.
Cinchonidine, $C_{19}H_{22}ON_2$.
Cinchotoxine, $C_{19}H_{22}ON_2$.
Citraconylhydrazides, isomeric (CHATTAWAY and PARKES), 283.
Coal, composition of (TIDESWELL and WHEELER), 2345.
British, composition and analysis of (DRAKELEY), 221.
Cobalt nitrosotricarbonyl (MOND and WALLIS), 34.
Cobaltous chloride, equilibrium in the system, ammonium chloride, water, and (CLENDINNEN), 801.
Hexamminocobaltic chloride, preparation of (MORGAN and SMITH), 1970.
Cobalt organic compounds:—
Cobalt bases (*cobaltammines*), salts of (DUFF), 450; (MORGAN and SMITH), 1956, 2866.
of nitro-colouring matters (MORGAN and KING), 1723.

Cobalt lakes of the alizarin series (MORGAN and SMITH), 160.
with quinoneoximes (MORGAN and MOSS), 2857.
Colloids, effect of, on the rate of evolution of carbon dioxide from solution (FINDLAY and HOWELL), 1046.
protective, rôle of, in catalysis (IREDALE), 1536.
effect of, on the corrosion of metals (FRIEND and VALLANCE), 466.
Colour, dicyclic theory of (MOIR), 1808.
calculation of, of azo-colouring matters (MOIR), 1555.
Colouring matters, optically active (SINGH, RAI, and LAL), 1421.
of the alizarin series (MORGAN and SMITH), 160.
from camphoric anhydride (SIRCAR and DUTT), 1283.
cyanine (MILLS), 455; (MILLS and BRAUNHOLTZ), 1489; (BRAUNHOLTZ and MILLS), 2004.
from *aa'*-dicyanodibenzyl diketone (DUTT and SEN), 2663.
from phenanthraquinone (SIRCAR and DUTT), 1944; (DUTT), 1951.
red sulphide (WATSON and DUTT), 1939, 2414.
from "saccharin" (DUTT), 2389.
from 1 : 2 : 4 : 5-tetrahydroxybenzene (MUKERJI), 545.
nitro-, cobaltammines of (MORGAN and KING), 1723.
Combustion of mixed gases (PAYMAN and WHEELER), 363.
*spiro***Compounds,** formation and stability of (KON), 513; (DICKENS, KON, and THORPE), 1496; (BIRCH and THORPE), 1821.
Co-ordination and residual affinity (MORGAN and SMITH), 160, 1956, 2866; (MORGAN and DREW), 922; (MORGAN and KING), 1723; (MORGAN, DREW, and BARKER), 2432; (MORGAN and MOSS), 2857; (MORGAN and LEDBURY), 2882.
Copper, action of ammonium nitrate and aqueous ammonia on (BASSETT and DURRANT), 2630.
peroxides (ALDRIDGE and APPLEBEY), 238.
Cupric chloride, reaction of hypophosphorous acid with (MITCHELL), 1624.
tetrammine nitrate and nitrite, properties of (BASSETT and DURRANT), 2630.
alkali sulphates, dissociation pressures of (CAVEN and FERGUSON), 1406.
Copper:—
Cuprous bromide and chloride, phototropy of (SINGH), 782.
chloride, preparation of, and its oxidation by sulphur dioxide (WARDLAW and PINKARD), 210.
action of sulphur on (PINKARD and WARDLAW), 1300.
Cuprates (ALDRIDGE and APPLEBEY), 242.
Copper, estimation of, iodometrically, in presence of iron (WARK), 358.
Corchorus capsularis (jute), glucoside from the leaves of (SAHA and CHOUDHURY), 1044.
Corrosion of metals, retardation of, by protective colloids (FRIEND and VALLANCE), 466.
Coumaranone series, studies in the (MINTON and STEPHEN), 1598.
Cryptal, $C_{10}H_{16}O$.
Crystals, structure of (BRAGG), 2766.
Cuminaldehyde, $C_{10}H_{12}O$.
Cuprates, Cupric, and **Cuprous salts.** See under Copper.
Cyanamides, condensation of hydrochlorides of, with phenols (SHORT and SMITH), 1803.
Cyanines, thio-, tautomerism of (MILLS and BRAUNHOLTZ), 1489.
*iso***Cyanines,** brominated (MOUDGILL), 1509.
Cyanine colouring matters (MILLS), 445; (MILLS and BRAUNHOLTZ), 1489; (BRAUNHOLTZ and MILLS), 2004.
Cyclic compounds, formation of, from halogenated open-chain derivatives (CHANDRASENA and INGOLD), 1306; (INGOLD), 2676.
tautomerism of, with open-chain isomerides (KON, STEVENSON, and THORPE), 650.
halogen derivatives, absorption spectra of (GRAHAM and MACBETH), 2601.

D.

Dialkyl sulphides, chloro- (POPE and SMITH), 1166.
Diamminodinitro-oxalatocobaltic acid, $C_2H_7O_8N_4Co$.
Dianthrone, 3 : 3'-*di*hydroxy-, $C_{28}H_{16}O_4$.
Dianthryl, 2 : 2'-*di*hydroxy-, $C_{28}H_{18}O_2$.
Diazo-reaction in the carbazole series (MORGAN and READ), 2709.
Diazonium salts, interaction of phenols and (CHATTAWAY and HILL), 2756.
Dibenzoylmethanes, selenium (MORGAN, DREW, and BARKER), 2464.
Dicyanodiamide, $C_2H_4N_4$.

Dieckmann reaction (KON), 513.
Dieckmann-Komppa reaction (DICKENS, KON, and THORPE), 1496.
Diethylenediaminecobaltic bromides, complex, conductivities of (DUFF), 450.
gem-**Diethyl groups**, effect of, on the carbon tetrahedral angle (DESHAPANDE and THORPE), 1430.
Dihydronaphthalene series (ROWE and DAVIES), 1000.
β-Diketones, interaction of selenium tetrachloride and (MORGAN, DREW, and BARKER), 2433.
action of carbon disulphide on thallous compounds of (MORGAN and LEDBURY), 2892.
Dimethylglyoxaline, $C_5H_8N_2$.
α-Dinaphthaxanthens, substituted, oxidation of (SEN-GUPTA and TUCKER), 557.
Disaccharides, constitution of (HAWORTH and LEITCH), 1921.
Dispersion, rotatory, of organic compounds (LOWRY and CUTTER), 532.
Distillation, separation of miscible liquids by (DUFTON), 306.
Distyryl ketones, benzopyrylium salts of (BUCK and HEILBRON), 1198.
Disulphides, aromatic, action of sulphuric acid on (SMILES and MCCLELLAND), 86.
p-**Disulphidobenzoic acid**, $C_{14}H_{10}O_4S_2$.
Dopplerite (TIDESWELL and WHEELER), 2345.
Drying, change of properties of substances on (BAKER), 568.

E.

Elements, artificial disintegration of (RUTHERFORD), 400.
Enzymes:—
Amylase.
Equilibria in systems of water and alcohols (PUSHIN and GLAGOLEVA), 2813.
Esters, velocity of saponification of (MCCOMBIE, SCARBOROUGH, and SETTLE), 2308.
interchange of alcohol radicles in (SHIMOMURA and COHEN), 883, 2051.
action of hydrazine on the halogen derivatives of (HIRST and MACBETH), 2169.
Ethers, *di*thio-, formation and properties of (NAIK and AVASARE), 2592.
C-**Ethylacetylacetones**, selenium (MORGAN, DREW, and BARKER), 2460.
Ethylhydrocupreidine, $C_{21}H_{28}O_2N_2$.
Ethylhydrocupreine, $C_{21}H_{28}O_2N_2$.
Eucalyptus oil, aromatic aldehydes in (PENFOLD), 266.
Explosion of mixed gases (CAMPBELL), 2483.
Explosives, high, velocity of decomposition of, in a vacuum (FARMER), 174.

F.

Fats, saponification of (NORRIS and MCBAIN), 1362.
Ferric salts. See under Iron.
Ferrioxalic acid, $C_6H_3O_{12}Fe$.
Flame, propagation of, in mixtures of air with gases (PAYMAN and WHEELER), 363; (WHITE), 1244, 1688, 2561.
Flash point, apparatus for determination of (WRIGHT), 2247.
Friedel and Crafts' reaction, use of iron pyrites in (SMYTHE), 1270.
Fuller's earth, adsorption and catalysis in (RIDEAL and THOMAS), 2119.
Fulminic acid, $C_3H_3O_3N_3$.

G.

Gambier-catechincarboxylic acid, $C_{16}H_{14}O_8$.
Gases, specific heat of (INGOLD and USHERWOOD), 2286.
mixed, explosion of (CAMPBELL), 2483.
ignition of (PAYMAN and WHEELER), 363; (WHITE), 1244, 1688, 2561; (MASON and WHEELER), 2079.
Gelatin, isoelectric condition of (RAWLING and CLARK), 2830.
thermal expansion of gels of (TAFFEL), 1971.
solubility of (FAIRBROTHER and SWAN), 1237.
Glucamine, $C_6H_{15}O_5N$.
Glucinum (*beryllium*) sulphate, equilibrium of ammonium sulphate, water, and (BRITTON), 2612.
Glucosamine, $C_6H_{13}O_5N$.
Glucosides, studies on (MACBETH and PRYDE), 1660.
See also:—
Amygdalin.
Capsularin.
Castelin.
Indican.
Pelargonenin.
Pelargonin.
Glutaconic acids, addition of hydrogen cyanide to derivatives of (HOPE and SHELDON), 2223.
esters, self-condensation of (INGOLD, PERREN, and THORPE), 1783.
Glutaric acids, αββ-trialkylated, preparation of (KON and THORPE), 1795.

Glutaric acid series, esters of the, Dieckmann reaction with (KON), 513.

H.

*iso***Hæmatin**, $C_{16}H_{10}O_5$.
Halogens, elimination of, in the reduction of halogenated nitro-compounds (BURTON and KENNER), 675.
Halogen atoms, lability of, in organic compounds (HENDERSON and MACBETH), 892; (HIRST and MACBETH), 904, 2169; (GRAHAM and MACBETH), 1109, 2601; (MACBETH), 1116; (BLACK, HIRST, and MACBETH), 2527.
hydrides, formation and dissociation of, in aqueous solution (RÂY and SARKAR), 1449.
Halogen organic compounds, action of ammonia and of titanous chloride on (BLACK, HIRST, and MACBETH), 2527.
containing nitrogen, action of hydrazine on (HIRST and MACBETH), 904.
Haloids, inorganic, interaction of organometallic compounds with (CHALLENGER and RIDGWAY), 107.
Harmaline, $C_{13}H_{14}ON_2$.
Harmine, $C_{12}H_{10}N_2$.
Harrison Memorial, 2894, 2917.
Heat, specific, of gases (INGOLD and USHERWOOD), 2286.
Heterocyclic compounds, effect of substitution on the formation and stability of (INGOLD, SAKO, and THORPE), 1177.
Hexadecanesulphonic acid, $C_{16}H_{34}O_3S$.
Hexahydrodioxydiboron. See under Boron.
Hexamminocobaltic chloride. See under Cobalt.
*cyclo***Hexanes**, substituted, action of hydrazine on halogen derivatives of (HIRST and MACBETH), 2169.
Homoterpenylic acid, $C_9H_{14}O_4$.
Hydantoins, effect of substitution on the formation and stability of (INGOLD, SAKO, and THORPE), 1177.
Hydrazones (BRADY and MCHUGH), 1648.
Hydrocarbons, paraffin, catalytic oxidation of (SALWAY and WILLIAMS), 1343.
Hydrocinchonidine, $C_{19}H_{24}ON_2$.
Hydrocinchonine, $C_{19}H_{24}ON_2$.
Hydro-ferri- and **-ferro-cyanides** of organic bases (CUMMING), 1287.
Hydrogen, specific heat of (INGOLD and USHERWOOD), 2286.
properties of, when desorbed from platinum and palladium (ANDERSON), 1153.
Hydrogen, formation and dissociation of polyhalogen compounds of, in aqueous solution (RÂY and SARKAR), 1449.
*per*oxide, catalytic decomposition of, by finely-divided platinum (MAXTED), 1760.
Hydroquinidine, $C_{20}H_{26}O_2N_2$.
Hydroquinine, $C_{20}H_{26}O_2N_2$.
Hydroxy-acids, action of potassium iodide and iodate on (KRISHNA and POPE), 798.
Hypophosphorous acid. See under Phosphorus.

I.

Ignition of gases (PAYMAN and WHEELER), 363; (WHITE), 1244, 2561; (MASON and WHEELER), 2079.
of mixtures of ammonia with air and oxygen (WHITE), 1688.
Imino-aryl ethers (CHAPMAN), 1676.
Indene, C_9H_8.
Indican, $C_{14}H_{17}O_6N$.
Indicator, modified methyl orange (HICKMAN and LINSTEAD), 2502.
Inulin, constitution of, and its methylation (IRVINE, STEELE, and SHANNON), 1060.
Iodine, action of sulphurous acid with (MACAULAY), 552.
Iron, rate of solution of, in dilute sulphuric acid (FRIEND and DENNETT), 41.
*penta*carbonyl and nitrosocarbonyl (MOND and WALLIS), 30, 35.
Ferric hydroxide, adsorption of radium *-B* and *-C* by (CRANSTON and HUTTON), 2843.
sulphates, equilibrium of formation of (APPLEBEY and WILKES), 337.
Ferrous chloride, equilibrium in the system, ammonium chloride, water, and (CLENDINNEN), 801.
Iron organic compounds:—
Ferric salts of 1 : 2 : 3 : 4-benzodiquinone-1 : 3-dioxime (MORGAN and MOSS), 2857.
Iron, estimation of, iodometrically in presence of copper (WARK), 358.
Iron pyrites. See Pyrites.

J.

Jute. See *Corchorus capsularis*.

K.

Ketones, interaction of thiocarbamides and (TAYLOR), 2267.

Ketones, unsaturated, reactivity of (BUCK and HEILBRON), 1095.
*di*thio-, formation and properties of (NAIK and AVASARE), 2592.

L.

Lauric acid, $C_{12}H_{24}O_2$.
Lead, vapour-pressure curve of (INGOLD), 2419.
oxides, physical chemistry of (GLASSTONE), 58, 1456, 1469, 2091.
*mono*xide, isomerism of (APPLEBEY and REID), 2129.
hydrates of (GLASSTONE), 58.
*di*oxide, electromotive properties of (GLASSTONE), 1469.
*sesqui*oxide (GLASSTONE), 1456.
Triplumbic *tetr*oxide (GLASSTONE), 1456.
Lead organic compounds (GODDARD, ASHLEY, and EVANS), 978.
action of thallic chloride on (D. and A. E. GODDARD), 260.
Lectures, delivered before the Chemical Society (RUTHERFORD), 400; (GREGORY), 750; (BRAGG), 2766.
Light, molecular scattering of, in *n*-pentane (VENKATESWARAN), 2655.
Linseed oil, oxidation of (COFFEY), 18.
Liquids, change of properties of, on drying (BAKER), 568.
adsorption of, by charcoal (DRIVER and FIRTH), 2409.
mixed, separation of, by distillation (DUFTON), 306.
Lubrication, boundary, in relation to chemical constitution (DOUBLEDAY), 2875.
Luteocobaltic chloride. See Hexamminocobaltic chloride under Cobalt.

M.

Magnesium nitrate, equilibrium of, with sodium nitrate and water and magnesium sulphate and water (JACKMAN and BROWNE), 694.
sulphate, equilibrium of ammonium and potassium sulphates, water, and (WESTON), 1223.
equilibrium of magnesium nitrate, water, and (JACKMAN and BROWNE), 694.
Magnetic field, effect of a, on catalysis by ions (GARNER and JACKMAN), 1298.
Malonic acids, bromo-, esters, action of hydrazine on (HIRST and MACBETH), 904.
Malonic acids, halogen-substituted, absorption spectra of derivatives of (GRAHAM and MACBETH), 1109.
Malonyl derivatives, halogenated, quantitative reduction of, by hydriodic acid (WEST), 2196.
Maple, Korean. See *Acer ginnala*.
Mercaptans, action of chloropicrin with (RÂY and DAS), 323.
Mercury chlorides, action of sulphur dioxide on (STEWART and WARDLAW), 1481.
Mercury organic compounds (HENRY and SHARP), 1055.
mercaptide nitrites, and their derivatives (RÂY), 1281.
Mercury cathode. See Cathode.
Metallic carbonyls (MOND and WALLIS), 29.
action of nitric oxide on (MOND and WALLIS), 32.
oxides, isomerism of (APPLEBEY and REID), 2129.
salts, reactions of, with dimethyldithiolethylene (MORGAN and LEDBURY), 2882.
Metals, corrosion of, influence of protective colloids on (FRIEND and VALLANCE), 466.
Methyl groups, reactivity of, in heterocyclic bases (MILLS and SMITH), 2724.
Methyl-orange, $C_{14}H_{15}O_3N_3S$.
Methylstannonic acid, formula and constitution of (LAMBOURNE), 2533.
Mobility of symmetrical tautomeric triad systems (INGOLD and PIGGOTT), 2581.
Molecular weights, determination of, in alcoholic solution by means of the flash-point elevation (WRIGHT), 2247.
Molybdenum carbonyl (MOND and WALLIS), 29.
Muscarine, isolation of, from *Amanita muscaria* (KING), 1743.

N.

Nalita (SAHA and CHOUDHURY), 1044.
Nickel, catalytic hydrogenation with (RIDEAL), 309.
chloride, equilibrium in the system, ammonium chloride, water, and (CLENDINNEN), 801.
Nitro-compounds, aromatic, removal of halogen atoms from (MACBETH), 1116.
halogenated, reduction of (BURTON and KENNER), 675.
Nitrogen atom, structure of the (MOIR), 1808.
explosion of acetylene and (GARNER and MATSUNO), 1729.

Nitrogen, reaction between carbon, sodium carbonate, and (INGOLD and WILSON), 2278.
*di*oxide (*nitric oxide*), action of, on metallic carbonyls (MOND and WALLIS), 32.
Nitrogen compounds, photosynthesis of (BALY, HEILBRON, and HUDSON), 1078.
Nitroprussic acid, $C_5H_2ON_6Fe$.

O.

Obituary notices:—
Ganesh Sakharan Agashe, 745.
James Robert Appleyard, 2898.
Adrian Brown, 2899.
William Gowland, 2907.
Philippe Auguste Guye, 2909.
Edward William Taylor Jones, 746.
William Kellner, 2912.
George William Macdonald, 2913.
John Spiller, 748.
Lionel William Stansell, 2916.
Oils, saponification of (NORRIS and MCBAIN), 1362.
drying, oxidation of (COFFEY), 17.
Oleic acid, $C_{18}H_{34}O_2$.
Orcinolsulphamphthalein, $C_{21}H_{17}O_5NS$.
Ores, genesis of, in relation to geographical distribution (GREGORY), 750.
Organic compounds, rotatory dispersion of (LOWRY and CUTTER), 532.
lability of halogen atoms in (HENDERSON and MACBETH), 892; (HIRST and MACBETH), 904, 2169; (GRAHAM and MACBETH), 1109, 2601; (MACBETH), 1116; (BLACK, HIRST, and MACBETH), 2527.
preparation of bromo-derivatives of, without production of hydrogen bromide (GUPTA and THORPE), 1896.
estimation of thallium in (A. E. and D. GODDARD), 488.
Organo-metallic compounds, preparation of (GODDARD, ASHLEY, and EVANS), 978.
interaction of, with inorganic haloids (CHALLENGER and RIDGWAY), 107.
Overvoltage (NEWBERY), 7.
Oximes, isomerism of (BRADY and THOMAS), 2098.
N-**Oximino-ethers** (BARROW, GRIFFITHS, and BLOOM), 1713.
Oxygen, ignition of mixtures of ammonia and (WHITE), 1688.

P.

Palladium, properties of hydrogen desorbed from (ANDERSON), 1153.
Palmitic acid, $C_{16}H_{32}O_2$.
Paraffins, nitro-, absorption spectra of (GRAHAM and MACBETH), 1109.
substituted, reduction of, with titanium salts (HENDERSON and MACBETH), 892.
Paraffin wax, composition of (FRANCIS), 496; (FRANCIS, WATKINS, and WALLINGTON), 1529, 2804.
Paullinia tannin, $C_{38}H_{36}O_{20}$.
Pelargonenin (CURREY), 322.
Pelargonin, $C_{27}H_{30}O_{15}$.
Pelargonium, scarlet, colouring matter of the (CURREY), 319.
*cyclo***Pentane compounds**, effect of attached groups on ring formation in (CHANDRASENA and INGOLD), 1552.
Phellandral, $C_{10}H_{16}O$.
Phenanthraquinone colouring matters (SIRCAR and DUTT), 1944; (DUTT), 1951.
Phenanthrene, $C_{14}H_{10}$.
Phenols, introduction of the chloroethyl group into (CLEMO and PERKIN), 642.
condensation of, with hydrochlorides of cyanamides and carbodi-imides (SHORT and SMITH), 1803.
interaction of diazonium salts and (CHATTAWAY and HILL), 2756.
sulphonation of (CAMPBELL), 847.
Phenols, *tri*iodo-, preparation of, from hydroxy-acids (KRISHNA and POPE), 798.
nitro-, metallic derivatives of (D. and A. E. GODDARD), 54; (GODDARD and WARD), 262.
Phenolcamphorein, $C_{22}H_{24}O_4$.
Phenolsulphamphthalein, $C_{19}H_{15}O_4NS$.
Phenylcyanourethane, $C_{10}H_{10}O_2N_2$.
m-**Phenylenediaminecamphorein**, $C_{22}H_{25}O_2N_3$.
Phenylsuccinyleosin, $C_{22}H_{12}O_5Br_4$.
Phloroglucinolcamphorein, $C_{22}H_{22}O_7$.
Phloroglucinolsulphamphthalein, $C_{19}H_{13}O_7NS$.
Phosphazines, reactions of (BRAUNHOLTZ), 300.
Phosphorus chlorides, action of, on chlorodimethyldihydroresorcinol (HINKEL and WILLIAMS), 2498.
*pent*oxide (*phosphoric oxide*), purification of (FINCH and PETO), 692.
treated with ozone, use of, as a drying agent (MANLEY), 331.
Hypophosphorous acid, studies on (MITCHELL), 1624.
Phosphorus organic compounds (BRAUNHOLTZ), 300.
Photocatalysis (BALY, HEILBRON, and HUDSON), 1078.
Photography, new sensitiser for (MILLS and POPE), 946.

Phototropy of metallic salts (SINGH), 782.
Physicist, rôle of the, in development of chemical theory (WALKER), 735.
Picrorocellin, $C_{20}H_{22}O_4N_2$.
Piperitone, $C_{10}H_{16}O$.
Platinum, properties of hydrogen desorbed from (ANDERSON), 1153.
catalytic decomposition of hydrogen peroxide by (MAXTED), 1760.
salts, hydrolysis of (ARCHIBALD and GALE), 2849.
Polarity, induced, of atoms (LAPWORTH), 416; (KERMACK and ROBINSON), 427.
Polycyclic compounds, chemistry of, in relation to their homocyclic unsaturated isomerides (FARMER, INGOLD, and THORPE), 128; (CHANDRASENA, INGOLD, and THORPE), 1542.
ε-**Polyoxymethylene** (HAMMICK and BOERRE), 2738.
Polysaccharides, constitution of (IRVINE, STEELE, and SHANNON), 1060; (IRVINE and HIRST), 1585.
Potassium platinibromide, hydrolysis of (ARCHIBALD and GALE), 2849.
iodate and iodide, action of, on hydroxy-acids (KRISHNA and POPE), 798.
sulphate, equilibrium of aluminium sulphate, water, and (BRITTON), 982.
equilibrium of ammonium and magnesium sulphates, water, and (WESTON), 1223.
*iso***Propylstannonic acid**, $C_3H_9O_3Sn$.
Pyridinium salts (BARNETT and COOK), 792.
Pyrites, use of, as a catalyst in Friedel and Crafts' reaction (SMYTHE), 1270.
Pyrogallolcamphorein, $C_{22}H_{22}O_7$.
Pyrylium salts, synthesis of (PRATT and ROBINSON), 1577.

Q.

Quinolcamphorein, $C_{22}H_{22}O_5$.
*iso***Quinoline-red**, $C_{20}H_{19}N_2Cl$.
Quinolsulphamphthalein, hydroxy-, $C_{19}H_{13}O_7NS$.
Quinotoxine, $C_{20}H_{24}O_2N_2$.

R.

Racemisation of optically active acid amides (MCKENZIE and SMITH), 1348.
Radium content of British coal (DRAKELEY and SMITH), 237.
Radium-*B* and *-C*, adsorption of, by ferric hydroxide (CRANSTON and HUTTON), 2843.
Resorcinolcamphorein, $C_{22}H_{22}O_5$.
Resorcinolphenylsuccinein, $C_{22}H_{16}O_5$.
Resorcinolsulphamphthalein, $C_{19}H_{13}O_5NS$.
Rings, four-membered, additive formation of (INGOLD and PIGGOTT), 2793.
Roccella fuciformis, picrorocellin from (FORSTER and SAVILLE), 816.
Rotation, optical, of sugars (MALTBY), 2608.
Rotatory dispersion. See Dispersion.
Ruthenium carbonyls (MOND and WALLIS), 30.

S.

Sabinene, $C_{10}H_{16}$.
"**Saccharin**," $C_7H_5O_3NS$.
Salts, complex, crystallography and optical properties of (KNAGGS), 2069.
Selenium *tetra*chloride, action of, with β-diketones (MORGAN, DREW, and BARKER), 2433.
Selenium organic compounds (MORGAN, DREW, and BARKER), 2443.
Semicarbazones, action of amines on (WILSON, HOPPER, and CRAWFORD), 866.
thio-, reactions of (WILSON and BURNS), 870.
Silicon *di*oxide, action of sodium chloride with (CLEWS and THOMPSON), 1442.
Silver bromide, action of light on (HARTUNG), 682.
Soap solutions, constitution of (MCBAIN, TAYLOR, and LAING), 621; (FLECKER and TAYLOR), 1101; (NORRIS), 2161.
effect of electrolytes on the constitution of (SALMON), 711; (MCBAIN and BURNETT), 1320.
ultra-filtration of (MCBAIN and JENKINS), 2325.
Sodium carbonate, equilibrium of sodium sulphate, water, and (DAWKINS), 776.
reaction between nitrogen, carbon, and (INGOLD and WILSON), 2278.
chloride, equilibrium of ammonium nitrate and (PERMAN), 2473.
equilibrium of sodium laurate, water, and (MCBAIN and BURNETT), 1320.
reactions of cellulose with (MASTERS), 2026.
action of silica with (CLEWS and THOMPSON), 1442.
chloride and sulphate, equilibrium of, with ammonium chloride and sulphate and water (RIVETT), 379.

Sodium nitrate, equilibrium of ammonium nitrate with (EARLY and LOWRY), 963.
equilibrium of magnesium nitrate, water, and (JACKMAN and BROWNE), 694.
sulphate, equilibrium of sodium carbonate, water, and (DAWKINS), 776.
Solution of substances in mixtures of alcohol and water (WRIGHT), 2251.
Solvents, influence of, on the velocity of formation of quaternary ammonium compounds (HAWKINS), 1170.
mixed, velocity of reaction in (CASHMORE, MCCOMBIE, and SCARBOROUGH), 243; (MCCOMBIE, SCARBOROUGH, and SETTLE), 2308.
Spectra, absorption, of bromomalonic derivatives and nitroparaffins (GRAHAM and MACBETH), 1109.
of halogen derivatives of cyclic compounds (GRAHAM and MACBETH), 2601.
Stannic acid and **salts**. See under Tin.
Stannous oxide. See under Tin.
Succinic acids, substituted, syntheses of (HIGGINBOTHAM and LAPWORTH), 49; (LAPWORTH and MCRAE), 1699, 2741.
Sugars, optical rotation of (MALTBY), 2608.
Sulphamphthaleins (DUTT), 2389.
Sulphide colouring matters, red (WATSON and DUTT), 1939, 2414.
Sulphilimines (MANN and POPE), 1052.
p-**Sulphinobenzoic acid**, $C_7H_6O_4S$.
Sulphonamides, aliphatic (CLUTTERBUCK and COHEN), 120.
Sulphonation of phenols (CAMPBELL), 847.
Sulphonic acids, *o*-amino-, aromatic, condensation of isocyanic acid with (SCOTT and COHEN), 2034.
Sulphonyl chlorides, aromatic (STEWART), 2555.
Sulphur, action of, on cuprous chloride (PINKARD and WARDLAW), 1300.
Sulphuryl chloride, chlorination of benzene with (SILBERRAD), 1015.
action of, on organic compounds (DURRANS), 44.
Sulphur *di*oxide, oxidising properties of (WARDLAW and PINKARD), 210.
oxidising and reducing properties of (STEWART and WARDLAW), 1481.
*tri*oxide, equilibrium of chromium trioxide, water, and (GILBERT, BUCKLEY, and MASSON), 1934.
Sulphurous acid, autoreduction of (BENNETT), 1794.
Sulphur:—
Sulphurous acid, action of iodine with (MACAULAY), 552.
Sulphites, alkali hydrogen, equilibria in aqueous solutions of (BALY and BAILEY), 1813.
Sulphuric acid, properties of mixtures of ethyl ether, water, and (POUND), 941.
action of, with aromatic disulphides (SMILES and MCCLELLAND), 86.
Sulphates, double hydrated, dissociation pressures of (CAVEN and FERGUSON), 1406.
Sulphur organic compounds (MANN and POPE), 1052.
Sulphuric and **Sulphurous acids**. See under Sulphur.
Sulphuryl chloride. See under Sulphur.
Surface tension, measurement of (SUGDEN), 858.
Systems, symmetrical tautomeric triad, mobility of (INGOLD and PIGGOTT), 2381.

T.

Tannins from *Acer ginnala* (PERKIN and UYEDA), 66.
catechu (NIERENSTEIN), 23.
Tautomerism of dyads (USHERWOOD), 1604.
intra-annular (FARMER, INGOLD, and THORPE), 128.
ring-chain (KON, STEVENSON, and THORPE), 650; (DESHAPANDE and THORPE), 1430; (INGOLD, PERREN, and THORPE), 1765.
Teraconic acid, $C_7H_{10}O_4$.
Thallium compounds, studies on (BERRY), 394.
chlorides, action of, on organo-metallic compounds (D. and A. E. GODDARD), 256.
Thallium organic compounds (GODDARD), 36; (A. E. and D. GODDARD), 256, 482.
Thallium, estimation of, in organic compounds (A. E. and D. GODDARD), 488.
Thapsic acid, $C_{16}H_{30}O_4$.
Thiocarbamides, interaction of aldehydes or ketones with (TAYLOR), 2267.
Thorium, adsorption of, by basic ferric acetate (BROWN), 1736.
oxide, reduction of, by metallic tungsten (GENERAL ELECTRIC CO.), 2236.
Tin:—
Stannous oxide and its hydrates, preparation and reactions of (BURY and PARTINGTON), 1998.

Tin:—
Stannic hydroxide, amphoteric properties of (COLLINS and WOOD), 441.
Stannic acids, isomerism of (COLLINS and WOOD), 441.
action of hydrochloric acid on (COLLINS and WOOD), 1122.
action of alkali hydroxides on (COLLINS and WOOD), 2760.
Tin organic compounds (GODDARD, ASHLEY, and EVANS), 978; (DRUCE), 1861.
Titanium salts, reduction of nitroparaffins with (HENDERSON and MACBETH), 892.
Titanous chloride, action of, on halogen organic compounds (BLACK, HIRST, and MACBETH), 2527.
Triazo-group (FORSTER and SAVILLE), 2595.
Tropic acid, $C_9H_{10}O_3$.
Tungsten, reduction of thorium oxide by (GENERAL ELECTRIC CO.), 2236.

U.

Ultra-filtration (MCBAIN and JENKINS), 2325.
Unsaturated compounds, formation of, from halogenated open-chain derivatives (CHANDRASENA and INGOLD), 1306; (INGOLD), 2676.
homocyclic, chemistry of polycyclic compounds in relation to isomeric (FARMER, INGOLD, and THORPE), 128; (CHANDRASENA, INGOLD, and THORPE), 1542.
Uranium-*X*, adsorption of, by basic ferric acetate (BROWN), 1736.

V.

Valency, theories of (LAPWORTH), 416; (KERMACK and ROBINSON), 427.
Vapour pressure at high temperatures (INGOLD), 2419.
Velocity of reaction in mixed solvents (CASHMORE, MCCOMBIE, and SCARBOROUGH), 243; (MCCOMBIE, SCARBOROUGH, and SETTLE), 2308.
Velocity of saponification of esters (MCCOMBIE, SCARBOROUGH, and SETTLE), 2308.
of oils and fats (NORRIS and MCBAIN), 1362.

W.

War Memorial, unveiling of, 2894.
Water, surface tension of mixtures of alcohol and (BIRCUMSHAW), 887.
Wax, paraffin. See **Paraffin wax**.

X.

Xanthorocellin, $C_{19}H_{16}O_2N_2$.
Xylene cyanole-*FF*, $C_{25}H_{25}O_8N_2S_2Na_2$

FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_4 Methane, ignition of mixtures of atmospheric air and (MASON and WHEELER), 2079; synthesis of the polyacetic acids of (INGOLD and PERREN), 1414; (INGOLD and NICKOLLS), 1638.

CS_2 Carbon *di*sulphide, action of, with thallous β-diketones (MORGAN and LEDBURY), 2892.

1 II

CHN Hydrocyanic acid, tautomerism of (USHERWOOD), 1604.

CH_2O_2 Formic acid, catalytic decomposition of, on platinum and silver (TINGEY and HINSHELWOOD), 1668; alkali salts, solubility of, in water (SIDGWICK and GENTLE), 1837.

CH_4O Methyl alcohol, equilibrium in the system, water and (PUSHIN and GLAGOLEVA), 2813; purification of, by means of sodium hypochlorite (MENZIES), 2787.

$COCl_2$ Carbonyl chloride, adsorption of, by beechwood charcoal (BUNBURY), 1525.

1 III

CHON *iso*Cyanic acid, condensation of, with aromatic *o*-aminosulphonic acids (SCOTT and COHEN), 2034.

CH_3ONa Sodium methoxide, action of, on benzophenone chloride and benzylidene chloride (MACKENZIE), 1695.

CH_4ON_2 Carbamide, estimation of, with sodium hypobromite (WERNER), 2318.

$CH_4N_2S_2$ Dithiocarbazinic acid, salts, decomposition of (LOSANITCH), 2542.

CH_6NCl Methylammonium chloride, action of dicyanodiamide with (WERNER and BELL), 1790.

CO_2NCl_3 Chloropicrin, action of, with mercaptans (RÂY and DAS), 323.

C_2 Group.

C_2H_2 Acetylene, explosion of nitrogen and (GARNER and MATSUNO), 1729.

C_2H_4 Ethylene, catalytic hydrogenation of, with nickel (RIDEAL), 309.

2 II

$C_2H_2O_4$ Oxalic acid, lead diphenyl salt (GODDARD, ASHLEY, and EVANS), 981.
$C_2H_4O_2$ Acetic acid, alkali salts, solubility of, in water (SIDGWICK and GENTLE), 1837; basic ferric salt, adsorption of radioactive substances by (BROWN), 1736.
$C_2H_4N_4$ Dicyanodiamide, action of, with methyl- and dimethyl-ammonium chlorides (WERNER and BELL), 1790.
$C_2H_4S_2$ Ethylene mercaptan, reaction of, with mercuric nitrite and ethyl iodide (RÂY), 1282.
C_2H_5I Ethyl iodide, reactions of, with triethylene tetrasulphide and with ethylene mercaptide nitrite (RÂY), 1282.
C_2H_6O Ethyl alcohol, solubility of substances in mixtures of water and (WRIGHT), 2251; surface tension of mixtures of water and (BIRCUMSHAW), 887.
$C_2H_7N_3$ Methylguanidine, preparation of, and its salts (WERNER and BELL), 1790.
C_2O_2Ru Ruthenium carbonyl (MOND and WALLIS), 30.

2 III

$C_2HO_2Cl_3$ Trichloroacetic acid, lead diphenyl salt (GODDARD, ASHLEY, and EVANS), 981.
$C_2H_2Cl_3As$ β-Chlorovinyldichloroarsine (MANN and POPE), 1754.
$C_2H_2N_2S_3$ 2:5-Dithiol-1:3:4-thiodiazole (LOSANITCH), 2544.
C_2H_5ClS β-Chloroethyl mercaptan (BENNETT), 2145.
C_2H_6OS Thioethyleneglycol, and its metallic mercaptides (BENNETT), 2139.
$C_2H_6N_4S_2$ Dithiocarbazinic thio-anhydride (LOSANITCH), 2543.
C_2H_7OTl Thalliumdimethyl hydroxide, salts of (GODDARD), 37.
C_2H_8NCl Dimethylammonium chloride, action of dicyanodiamide with (WERNER and BELL), 1790.

2 IV

$C_2H_2ONBr_3$ Tribromoacetamide (GUPTA and THORPE), 1900.
$C_2H_2O_2ClAs$ β-Chlorovinylarsinic oxide (MANN and POPE), 1755.
C_2H_2ClSAs β-Chlorovinylarsenious sulphide (MANN and POPE), 1756.
$C_2H_4O_2ClAs$ β-Chlorovinylarsinic acid, and its ammonium salt (MANN and POPE), 1755.
$C_2H_5O_3ClS$ β-Chloroethanesulphonic acid, lead salt (MANN and POPE), 600.
$C_2H_7O_8N_4Co$ Diamminodinitro-oxalatocobaltic acid, salts, crystallography, and optical properties of (KNAGGS), 2069.

C_3 Group.

C_3H_4O Acraldehyde, interaction of aniline and (MANN), 2178.
C_3H_6O Acetone, constitution of sugar derivatives of (IRVINE and PATTERSON), 2146.
Allyl alcohol, conversion of, into glyceryl bromo- and chloro-hydrins (READ and HURST), 989.
$C_3H_6O_2$ Propionic acid, lead diphenyl salt (GODDARD, ASHLEY, and EVANS), 981.
$C_3H_6O_3$ α-Trioxymethylene, preparation of (HAMMICK and BOEREE), 2738.
$C_3H_8O_3$ Glycerol, equilibrium in the system, water and (PUSHIN and GLAGOLEVA), 2818.
C_3H_9N Trimethylamine, hydroferrocyanide of (CUMMING), 1297.
$C_3H_9N_3$ ββ-Dimethylguanidine, preparation of, and its salts (WERNER and BELL), 1790.

3 III

$C_3H_2N_2Br_2$ Dibromoglyoxalines, and their hydrochlorides (BALABAN and PYMAN), 953.

$C_3H_3O_3N_3$ Fulminic acid, mercuric salt, velocity of decomposition of (FARMER), 174.

$C_3H_3N_2Br$ 4-Bromoglyoxaline, and its salts (BALABAN and PYMAN), 951.

$C_3H_6OCl_2$ Glyceryl β-dichlorohydrin, preparation of, from allyl alcohol (READ and HURST), 999.

$C_3H_6OBr_2$ Glyceryl β-dibromohydrin, preparation of, from allyl alcohol (READ and HURST), 995.

$C_3H_7O_2N$ Urethane, equilibrium in the system, *m*-dinitrobenzene and (PUSHIN and FIOLETOVA), 2822.

$C_3H_7O_2Cl$ Glyceryl β-monochlorohydrin, preparation of, from allyl alcohol (READ and HURST), 998.

$C_3H_7O_2Br$ Glyceryl β-monobromohydrin, preparation of, from allyl alcohol (READ and HURST), 989.

$C_3H_7Br_3Sn$ Tin *iso*propyl tribromide (DRUCE), 1861.

$C_3H_8O_3Sn$ *iso*-Propylstannonic acid, and its salts (DRUCE), 1859.

$C_3[illegible]$ salt nitrosotricarbonyl (MOND and WALLIS), 34.

3 IV

$C_3HO_2N_2Br_2$ 2:4-Dibromo-5-nitroglyoxaline (BALABAN and PYMAN), 958.

$C_3H_2O_3N_2Br$ 4-Bromo-5-nitroglyoxaline (BALABAN and PYMAN), 952.

$C_3H_3ON_2Br$ Bromocyanoacetamide (GUPTA), 1902.

$C_3H_6O_3Cl_2S$ βγ-Dichloropropanesulphonic acid, salts of (POPE and SMITH), 1169.

$C_3H_{12}O_4N_4S_2$ αγ-Propanedisulphonyldihydrazide (CLUTTERBUCK and COHEN), 128.

3 V

$C_3H_3O_3N_2BrS$ 4-Bromoglyoxaline-5-sulphonic acid, and its barium salt (BALABAN and PYMAN), 954.

C_4 Group.

$C_4H_6O_3$ 1-Hydroxy*cyclo*propane-1-carboxylic acid (INGOLD, SAKO, and THORPE), 1197.

$C_4H_6O_5$ *l*-Malic acid, activation of racemic acid by (MCKENZIE and WALKER), 349.

$C_4H_6O_6$ Racemic acid, optical activation of, by *l*-malic acid (MCKENZIE and WALKER), 349.

C_4H_6S Divinyl sulphide, synthesis of (BALES and NICKELSON), 2137.

C_4H_8O Methyl ethyl ketone, condensation of, in presence of calcium carbide (BECKER and THORPE), 1303.

$C_4H_{10}O$ Ethyl ether, properties of mixtures of sulphuric acid, water, and (POUND), 941.

$C_4H_{10}O_4$ Erythritol, equilibrium in the system, water and (PUSHIN and GLAGOLEVA), 2820.

$C_4H_{10}S_2$ Dimethyldithiolethylene, reactions of metallic salts with (MORGAN and LEDBURY), 2882.

$C_4H_{11}N_3$ *dl*-Alanine-*N*-methylamidine, salts of (PYMAN), 2623.

4 III

$C_4H_2N_4S_5$ 2-Thiol-1:3:4-thiodiazolyl sulphide (LOSANITCH), 2544.

$C_4H_2N_4S_6$ 2-Thiol-1:3:4-thiodiazolyl disulphide (LOSANITCH), 2545.

$C_4H_4N_4S_7$ 2-Thiol-1:3:4-thiodiazolyl polysulphide (LOSANITCH), 2545

$C_4H_4ON_2$ 1-Amino*cyclo*propane-1-carboxylamide, and its hydrochloride (INGOLD, SAKO, and THORPE), 1196.

$C_4H_4N_2Br_2$ 4:5-Dibromo-2-methylglyoxaline, and its salts (LIGHT and PYMAN), 2627.

$C_4H_4Cl_3As$ $\beta\beta'$-Dichlorodivinylchloroarsine (MANN and POPE), 1754.

$C_4H_5N_2Br$ 4-Bromo-2-methylglyoxaline, and its salts (LIGHT and PYMAN), 2628.

$C_4H_7O_2N$ 1-Amino*cyclo*propane-1-carboxylic acid, hydrochloride of (INGOLD, SAKO, and THORPE), 1196.

$C_4H_8Cl_2S$ $\beta\beta'$-Dichlorodiethyl sulphide, preparation and reactions of (MANN and POPE), 594; hydrolysis of, and its non-vesicant isomeride (BALES and NICKELSON), 2137.

$C_4H_9N_3S$ Acetonethiosemicarbazone, silver and sodium salts (WILSON and BURNS), 873.

$C_4H_{11}OTl$ Thalliumdiethyl hydroxide, salts of (GODDARD), 37.

4 IV

$C_4H_2O_2N_2Br_2$ 2:5-Dibromoglyoxaline-4-carboxylic acid (BALABAN and PYMAN), 956.

$C_4H_4O_2NCl$ Succinchloroimide, preparation of (HIRST and MACBETH), 2174.

$C_4H_4O_2N_2Br$ 4-Bromo-5-nitro-2-methylglyoxaline (LIGHT and PYMAN), 2629.

$C_4H_5O_2Cl_2As$ $\beta\beta'$-Dichlorodivinylarsinic acid (MANN and POPE), 1756.

$C_4H_6OCl_4S$ $\alpha\beta\beta'$-Tetrachlorodiethyl sulphoxide (MANN and POPE), 603.

$C_4H_7OCl_3S$ $\alpha\beta\beta'$-Trichlorodiethyl sulphoxide (MANN and POPE), 603.

$C_4H_{10}ON_2S$ Thiocarbamide-acetone, picrate of (TAYLOR), 2271.

4 V

$C_4H_5O_3N_2BrS$ 4-Bromo-2-methylglyoxaline-5-sulphonic acid ($+H_2O$) (LIGHT and PYMAN), 2629.

$C_4H_{16}O_3N_4BrSCo$ *cis*-Sulphitodiethylenediaminecobaltic bromide ($+H_2O$) (DUFF), 452.

$C_4H_{16}O_3N_4BrS_2Co$ *cis*-Thiosulphatodiethylenediaminecobaltic bromide ($+3H_2O$) (DUFF), 453.

$C_4H_{16}O_4N_4BrSCo$ *cis*-Sulphatodiethylenediaminecobaltic bromide ($+H_2O$) (DUFF), 452.

C_5 Group.

C_5H_{12} *n*-Pentane, molecular scattering of light in (VENKATESWARAN), 2655.

5 II

C_5H_5N Pyridine, hydroferrocyanide of, and its separation from quinoline (CUMMING), 1297; *iso*propylstannic salts of (DRUCE), 1861.

$C_5H_8N_2$ Dimethylglyoxalines, orientation of (PYMAN), 2616.

$C_5H_9N_3$ Aminodimethylglyoxalines, and their salts (PYMAN), 2625.

$C_5H_{10}O_2$ Valeric acid, lead diphenyl salt (GODDARD, ASHLEY, and EVANS), 981.

$C_5H_{10}O_5$ Xylose, methylation of (CARRUTHERS and HIRST), 2299.

C_5O_5Fe Iron pentacarbonyl (MOND and WALLIS), 30.

5 III

$C_5H_6O_2N_2$ 5-*cyclo*Propane*spiro*hydantoin (INGOLD, SAKO, and THORPE), 1191.

$C_5H_6O_4Cl_2$ Methyl dichloromalonate, preparation of (HIRST and MACBETH), 2177.

$C_5H_7O_2N$ Ethyl cyanoacetate, condensation of, with ethyl muconate (FARMER), 2015.

$C_5H_7O_2N_3$ Nitrodimethylglyoxalines (PYMAN), 2622.

$C_5H_7O_4N_3$ 1-Nitrosocarbamido*cyclo*propane-1-carboxylic acid (INGOLD, SAKO, and THORPE), 1195.

$C_5H_7O_4Cl$ Methyl chloromalonate, preparation of (HIRST and MACBETH), 2177.

$C_5H_9O_3N_3$ 1-Carbamido*cyclo*propane-1-carboxylic acid (INGOLD, SAKO, and THORPE), 1195.

$C_5H_{10}NCl$ 1-Chloropiperidine, preparation of (HIRST and MACBETH), 2173.

$C_5H_{13}O_2N$ Methylaminodimethylacetal (KERMACK, PERKIN, and ROBINSON), 1886.

5 IV

$C_5H_3ON_6Fe$ Nitroprussic acid, carbazole-3-diazonium salts of (MORGAN and READ), 2714.

$C_5H_4O_2N_2Br_2$ Bromo-5-*cyclo*propane*spiro*hydantoin (INGOLD, SAKO, and THORPE), 1191.

$C_5H_5O_2ClTe$ Tellurium chloroacetylacetone (MORGAN and DREW), 936.

$C_5H_5O_2Cl_3Te$ Tellurium chloroacetylacetone dichloride (MORGAN and DREW), 935.

$C_5H_6O_2N_2Br_2$ *cyclo*Propane-1:1-dicarboxylbromoamide (INGOLD, SAKO, and THORPE), 1190.

$C_5H_8O_2N_2Cl_2$ Dichloromalondimethylamide (WEST), 2202.

$C_5H_8O_2N_2Br_2$ Dimethylmalonbromoamide (INGOLD, SAKO, and THORPE), 1192.

$C_5H_{12}O_4N_4S_2$ $\alpha\epsilon$-Pentanedisulphonyldihydrazide (CLUTTERBUCK and COHEN), 128.

5 V

$C_5H_8O_2N_2ClBr$ Chlorobromomalondimethylamide (WEST), 2202.

C_6 Group.

C_6H_6 Benzene, constitution of (FRASER), 188; variation of the refractive index and density of, with temperature (PARKER and THOMPSON), 1341; action of benzyl chloride and, in presence of iron pyrites (SMYTHE), 1276; chlorination of, with sulphuryl chloride (SILBERRAD), 1015.

6 II

C_6H_6O Phenol, mechanism of the bromination of (BAINES), 2810.

$C_6H_6O_2$ Resorcinol, condensation of cinnamic acid with (SHORT and SMITH), 1808.

$C_6H_6O_3$ *cis*-3-Methyl*cyclo*propane-1:2-dicarboxylic anhydride (INGOLD), 2687.

$C_6H_6O_4$ Muconic acid, constitution of (CHANDRASENA and INGOLD), 1306.

1:2:4:5-Tetrahydroxybenzene, colouring matters from (MUKERJI), 545.

C_6H_7N Aniline, interaction of acraldehyde and (MANN), 2178; hydroferrocyanide of (CUMMING), 1293.

$C_6H_8O_4$ α-Hydroxy-β-methylglutaric lactone, and its salts (INGOLD), 2686.

3-Methyl*cyclo*propane-1:2-dicarboxylic acids, and their salts (INGOLD), 2687.

$C_6H_8O_5$ $\alpha\alpha$-Dihydroxy-β-methylglutaric lactones (INGOLD), 2691.

3-Methyl*cyclo*propan-1-ol-1:2-dicarboxylic acid, and its silver salt (INGOLD), 2693.

Lactonic acid of butane-$\alpha\gamma$-diol-$\alpha\beta$-dicarboxylic acid, and its silver salt (INGOLD), 2695.

$C_6H_8O_6$ Propane-$\alpha\gamma\gamma$-tricarboxylic acid (DICKENS, KON, and THORPE), 1502.

$C_6H_8N_2$ Phenylenediamine, hydroferrocyanides of (CUMMING), 1295.

$C_6H_8O_5$ α-Hydroxy-β-methylglutaric acid, and its salts (INGOLD), 2687.

$C_6H_{10}O_5$ Methylitamalic acid, and its barium salt (INGOLD), 2689.

$C_6H_{10}O_6$ αα′-Dihydroxy-β-methylglutaric acids, and their salts (INGOLD), 2691.

Butane-αγ-diol-αβ-dicarboxylic acid, and its salts (INGOLD), 2694.

$C_6H_{12}O_5$ Aceritol (PERKIN and UYEDA), 70.

$C_6H_{12}O_6$ Fructose, constitution and rotation of compounds of, with boric acid and sodium hydroxide (GILMOUR), 1333.

Fructose and Glucose, constitution of acetone derivatives of (IRVINE and PATTERSON), 2146.

$C_6H_{12}S_3$ Triethylene trisulphide, and its reactions with mercuric salts, with ethyl iodide, and with platinic chloride (RÂY), 1279.

$C_6H_{12}S_4$ Triethylene tetrasulphide, and its reactions with mercuric salts and with ethyl iodide (RÂY), 1279.

$C_6H_{14}O_2$ Pinacone, equilibrium in the system, water and (PUSHIN and GLAGOLEVA), 2816.

$C_6H_{14}O_6$ Mannitol, constitution and rotation of compounds of, with boric acid and sodium hydroxide (GILMOUR), 1333.

6 III

$C_6H_3O_7N_3$ Picric acid, cobaltammine salts of (MORGAN and KING), 1725.

$C_6H_3O_{12}Al$ Aluminioxalic acid, potassium salt, crystallography and optical properties of (KNAGGS), 2072.

$C_6H_3O_{12}Cr$ Chromioxalic acid, potassium salt, autoracemisation of (RIDEAL and THOMAS), 196.

$C_6H_3O_{12}Fe$ Ferrioxalic acid, potassium salt (+ $3H_2O$), crystallography and optical properties of (KNAGGS), 2070.

$C_6H_4O_4N_2$ 1:2:3:4-Benzodiquinone-1:3-dioxime, cobaltammine and ferric salts of (MORGAN and MOSS), 2857.

m-Dinitrobenzene, equilibrium in the system, urethane and (PUSHIN and FIOLETOVA), 2822.

$C_6H_4O_5N_2$ 3:5-Dinitrophenol, solubility and volatility of (SIDGWICK and TAYLOR), 1853.

C_6H_5OCl Chlorophenols, solubility of (SIDGWICK and TURNER), 2256.

$C_6H_5O_4Br$ α-Bromomuconic acid (CHANDRASENA and INGOLD), 1317.

$C_6H_5O_5Br$ α-Bromo-γδ-dihydroxy-Δ^{α}-dihydromuconic lactone (CHANDRASENA and INGOLD), 1316.

$C_6H_5N_2Cl$ Benzenediazonium chloride, interaction of bismuth trichloride and (CHALLENGER and WILKINSON), 102.

C_6H_6OS *m*-Hydroxyphenyl mercaptan (WATSON and DUTT), 2415.

$C_6H_6O_4N_2$ 2:3:5:6-Tetraketo-1:4-dimethylpiperazine (FORSTER and SAVILLE), 824.

$C_6H_6N_4S_5$ 2-Thiol-1:3:4-thiodiazolyl sulphide dimethyl ether (LOSANITCH), 2544.

$C_6H_6Cl_3As$ ββ′β″-Trichlorotrivinylarsine, and its salts (MANN and POPE), 1754.

$C_6H_7O_2N_3$ *p*-Nitrophenylhydrazine, preparation of (DAVIES), 715.

$C_6H_7O_3Cl$ Chloro-*as*-dimethylsuccinic hydroxyanhydride (FARMER, INGOLD, and THORPE), 158.

$C_6H_7O_4Br$ 1-Bromo-3-methyl*cyclo*propane-1:2-dicarboxylic acid, and its silver salt (INGOLD), 2692.

$C_6H_7O_5Br$ δ-Bromo-γ-hydroxy-Δ^{α}-dihydromuconic acid (CHANDRASENA and INGOLD), 1318.

$C_6H_8O_2N_2$ *cyclo*Butane*spiro*hydantoin (INGOLD, SAKO, and THORPE), 1192.
$C_6H_8O_2Te$ Tellurium 3-methylacetylacetone (MORGAN and DREW), 932.
$C_6H_8O_4Br_2$ $\alpha\alpha'$-Dibromo-β-methylglutaric acid (INGOLD), 2685.
$C_6H_{10}O_2N_2$ *cyclo*Butane-1:1-dicarboxylamide (INGOLD, SAKO, and THORPE), 1191.
$C_6H_{10}Cl_4S$ $\beta\beta'\gamma\gamma'$-Tetrachlorodipropyl sulphide (POPE and SMITH), 1168.
$C_6H_{10}Cl_4S_2$ $\beta\beta'\gamma\gamma'$-Tetrachlorodipropyl disulphide (POPE and SMITH), 1169.
$C_6H_{11}O_2N$ Ethyl 1-amino*cyclo*propane-1-carboxylate, hydrochloride (INGOLD, SAKO, and THORPE), 1196.
$C_6H_{11}O_3N_3$ *iso*Nitrosomalondimethylamide methyl ether (RENDALL and WHITELEY), 2116.
$C_6H_{12}O_9Sn_3$ Triformyl derivative of methylstannonic acid (LAMBOURNE), 2539.
$C_6H_{13}O_5N$ Glucosamine, mutarotation of, and preparation of its hydrochloride (IRVINE and EARL), 2370.
$C_6H_{13}N_3S$ Substance, from ethyl chloroformate and sodium acetonethiosemicarbazone (WILSON and BURNS), 876.
$C_6H_{14}OSn$ Tin di*iso*propyl oxide (DRUCE), 1861.
$C_6H_{14}Cl_2Sn$ Tin di*iso*propyl dichloride (DRUCE), 1862.
$C_6H_{14}Br_2Sn$ Tin di*iso*propyl dibromide (DRUCE), 1863.
$C_6H_{15}O_5N$ Glucamine, production of (LING and NANJI), 1686.
$C_6H_{15}O_6N$ Glucose-ammonia, crystalline (LING and NANJI), 1682.
$C_6H_{15}SI$ Triethylsulphonium bromide, absorption spectra of, in various solvents (TAYLOR and LEWIS), 665.

6 IV

$C_6H_3O_3Cl_3S$ 2:5-Dichlorobenzenesulphonyl chloride (STEWART), 2557.
$C_6H_4O_3NAg$ Silver nitrophenoxides (GODDARD and WARD), 264.
$C_6H_4O_3NCs$ Caesium nitrophenoxides (D. and A. E. GODDARD), 56.
$C_6H_4O_3NK$ Potassium nitrophenoxides (D. and A. E. GODDARD), 56.
$C_6H_4O_3NLi$ Lithium nitrophenoxides (D. and A. E. GODDARD), 56.
$C_6H_4O_3NNa$ Sodium nitrophenoxides (D. and A. E. GODDARD), 56.
$C_6H_4O_3NRb$ Rubidium nitrophenoxides (D. and A. E. GODDARD), 56.
$C_6H_4O_4N_2S$ Dinitrosothiolresorcinol (WATSON and DUTT), 1943.
$C_6H_4O_7N_2Pb_2$ Lead 2:4-dinitrophenoxide (GODDARD and WARD), 266.
$C_6H_4ClBr_2Bi$ *p*-Chlorophenyldibromobismuthine (CHALLENGER and RIDGWAY), 110.
$C_6H_5O_5NPb_2$ Lead *o*- and *p*-nitrophenoxides (GODDARD and WARD), 264.
$C_6H_6OCl_3As$ $\beta\beta'\beta''$-Trichlorotrivinylarsenic oxide, and its nitrate (MANN and POPE), 1757.
$C_6H_6O_2N_2Br_2$ Ethyl 2:5-dibromoglyoxaline-4-carboxylate (BALABAN and PYMAN), 955.
$C_6H_6O_4NS$ 2-Aminophenol-4-sulphonic acid, cobaltammine salt of (MORGAN and MOSS), 2865.
$C_6H_6O_4ClBr$ Methyl γ-chloro-δ-bromo-Δ_α-d hydromuconate (CHANDRASENA and INGOLD), 1318.
$C_6H_6O_5N_2S$ *p*-Nitroaniline-*o*-sulphonic acid, salts of (SCOTT and COHEN), 2038.
$C_6H_6Cl_3Br_2As$ $\beta\beta'\beta''$-Trichlorotrivinylarsine dibromide (MANN and POPE), 1757.
$C_6H_7O_3NSe$ Cyano-3-selenium acetylacetone (MORGAN, DREW, and BARKER), 2447.
$C_6H_7O_6NMg_2$ Magnesium *m*-nitrophenoxide (GODDARD and WARD), 264.

$C_6H_7O_6NPb_2$ Lead *p*-nitrophenoxide (GODDARD and WARD), 265.
$C_6H_7O_8N_2S_2$ *p*-Nitrophenylhydrazinedisulphonic acid, ammonium salt (DAVIES), 720.
$C_6H_8O_2N_2Br_2$ *cyclo*Butane-1:1-dicarboxylbromoamide (INGOLD, SAKO, and THORPE), 1191.
$C_6H_8O_2Cl_2Te$ Tellurium 3-methylacetylacetone dichloride (MORGAN and DREW), 931.
$C_6H_8O_2Br_2Te$ Tellurium 3-methylacetylacetone dibromide (MORGAN and DREW), 932.
$C_6H_8O_2I_2Te$ Tellurium 3-methylacetylacetone di-iodide (MORGAN and DREW), 932.
$C_6H_9ON_2S$ Substance, from *l*-menthyl chloroacetate and sodium acetonethiosemicarbazone (WILSON and BURNS), 875.

6 V

$C_6H_6O_3NBrS$ *p*-Bromoaniline-*o*-sulphonic acid, salts of (SCOTT and COHEN), 2044.

C_7 Group.

C_7H_8 Toluene, nitration of (GIBSON, DUCKHAM, and FAIRBAIRN), 270.

7 II

$C_7H_6O_2$ Benzoic acid, alkali salts, solubility of, in water (SIDGWICK and EWBANK), 1844.
$C_7H_6O_3$ Hydroxybenzoic acids, alkali salts, solubility of, in water (SIDGWICK and EWBANK), 1844.
Salicylic acid, cobaltammine salt of (MORGAN and SMITH), 2874.
$C_7H_6Cl_2$ Benzylidene chloride, action of sodium methoxide and its homologues on (MACKENZIE), 1695.
C_7H_7Cl Benzyl chloride, action of benzene and, in presence of iron pyrites (SMYTHE), 1276.
C_7H_8O *iso*Butylene-$\alpha\gamma\gamma'$-tricarboxylic acid (INGOLD and NICKOLLS), 1644.
Cresols, reciprocal polarity effects in, and in their derivatives (LAPWORTH and SHOESMITH), 1391.
C_7H_9N Benzylamine, hydroferrocyanide of (CUMMING), 1294.
Methylaniline, hydroferrocyanide of (CUMMING), 1296.
Toluidines, hydroferrocyanides of, and their separation (CUMMING), 1293.
$C_7H_{10}O_2$ 5:5-Dimethyl-Δ^1-*cyclo*penten-1-ol-3-one (FARMER, INGOLD, and THORPE), 156.
$C_7H_{10}O_4$ Teraconic acid, preparation of (FARMER, INGOLD, and THORPE), 150.
$C_7H_{10}O_5$ 1-Methoxy-3-methyl*cyclo*propane-1:2-dicarboxylic acid (INGOLD), 2694.
$C_7H_{10}O_6$ Methanetriacetic acid, preparation of, and its esters (INGOLD and PERREN), 1414.
$C_7H_{10}N_2$ 2:4-Tolylenediamine, hydroferrocyanide of (CUMMING), 1295.
$C_7H_{12}O_4$ Ethyl malonate, condensation of, with ethyl muconate (FARMER), 2015.
$C_7H_{14}O_6$ γ-Methylfructoside (MENZIES), 2238.

7 III

$C_7H_4O_2S_2$ 2-Dithiobenzoyl (SMILES and MCCLELLAND), 89.
C_7H_5OCl Benzoyl chloride, chlorination of (HOPE and RILEY), 2510.
$C_7H_5O_2I$ Iodo-*m*-hydroxybenzaldehyde (HENRY and SHARP), 1059.
$C_7H_5O_3N$ Nitrobenzaldehydes, solubility and volatility of (SIDGWICK and DASH), 2586.

$C_7H_5O_4N$ *p*-Nitrobenzoic acid, lead diphenyl salt (GODDARD, ASHLEY, and EVANS), 982.
$C_7H_6O_2S$ *p*-Thiolbenzoic acid (SMILES and HARRISON), 2024.
$C_7H_6O_3S$ 5-Thiolsalicylic acid (STEWART), 2560.
$C_7H_6O_4S$ *p*-Sulphinobenzoic acid (SMILES and HARRISON), 2024.
$C_7H_6O_3S$ 5-Sulphinosalicylic acid (STEWART), 2559.
$C_7H_6O_4Hg_2$ 3:5-Dihydroxydimercuri-4-hydroxybenzaldehyde (HENRY and SHARP), 1058.
3:5-Dihydroxydimercurisalicylaldehyde (HENRY and SHARP), 1057.
C_7H_7ONa Sodium benzyloxide, reactivity of alkyl iodides with (HAYWOOD), 1904.
$C_7H_7O_2N$ Anthranilic acid, cobaltous salt (MORGAN and MOSS), 2866.
m-Nitrotoluene, nitration of (BRADY), 328.
$C_7H_7O_2N_3$ Nitrobenzylamines, preparation of (INGOLD and PIGGOTT), 2384.
$C_7H_7O_4N_3$ Dinitrotoluidines (BRADY, DAY, and ROLT), 526; (SCOTT and ROBINSON), 844.
$C_7H_7NCl_2$ 2:6-Dichloro-*p*-toluidine, and its hydrochloride (DAVIES), 813.
$C_7H_7N_2Cl$ *p*-Toluenediazonium chloride, interaction of bismuth chloride and (CHALLENGER and WILKINSON), 103.
$C_7H_8O_3N_2$ 2:6-Dihydroxypyridine-4-acetamide (INGOLD and NICKOLLS), 1644.
C_7H_8NI 6-Iodo-*m*-toluidine, and its hydrochloride (BURTON and KENNER), 680.
C_7H_9ON *o*-Anisidine, hydroferrocyanide of (CUMMING), 1295.
$C_7H_9O_3N_3$ *m*-Nitro-*p*-tolylhydrazine, preparation of (DAVIES), 720.
$C_7H_9O_3Cl$ Chloro-5:5-dimethyl-Δ^1-*cyclo*penten-1-ol-3-ones (FARMER, INGOLD, and THORPE), 156.
$C_7H_{10}O_3Te$ Tellurium 3-ethylacetylacetone (MORGAN and DREW), 933.
$C_7H_{10}O_4Cl_2$ Ethyl dichloromalonate, preparation of (MACBETH), 1120.
$C_7H_{11}O_3N$ Ethyl *cyclo*propane-1-carboxylamide-1-carboxylate (INGOLD, SAKO, and THORPE), 1189.
$C_7H_{11}O_4Cl$ Ethyl chloromalonate, preparation of (MACBETH), 1120.
$C_7H_{13}O_3N_3$ *iso*Nitrosomalondimethylamide ethyl ether (RENDALL and WHITELEY), 2117.

7 IV

$C_7H_3O_6N_3Cl_2$ 2:6-Dichloro-3:4:5-trinitrotoluene (DAVIES), 814.
$C_7H_4O_3Cl_2Hg_2$ 3:5-Dichlorodimercuri-4-hydroxybenzaldehyde (HENRY and SHARP), 1058.
3:5-Dichlorodimercurisalicylaldehyde (HENRY and SHARP), 1057.
$C_7H_4O_4N_2Cl_2$ 2:6-Dichloro-3:4-dinitrotoluene (DAVIES), 812.
$C_7H_5ONCl_2$ Benzenedichloroamide (ELLIOTT), 203.
$C_7H_5O_2NCl_2$ Dichloronitrotoluenes (DAVIES), 812.
$C_7H_5O_3NS$ "Saccharin," colouring matters from (DUTT), 2389.
$C_7H_5O_4ClS$ *p*-Chlorosulphonylbenzoic acid (SMILES and HARRISON), 2023.
$C_7H_5O_3ClS$ 5-Chlorosulphonylsalicylic acid (STEWART), 2559.
C_7H_6ONCl Benzenechloroamide, preparation and reactions of (ELLIOTT), 203.
$C_7H_6O_2N_2Cl_2$ 2:6-Dichloro-3-nitro-*p*-toluidine, and its hydrochloride (DAVIES), 814.
$C_7H_7O_6NS$ 3-Nitro-*o*-cresol-5-sulphonic acid, metallic salts (DAVIES), 791.
$C_7H_7O_7N_2S_2$ Phenylcarbamide-2:4-disulphonic acid, potassium salt (SCOTT and COHEN), 2043.
$C_7H_8O_4N_2S$ *o*-Carbamidobenzenesulphonic acid ($+H_2O$), and its salts, (SCOTT and COHEN), 2042.

$C_7H_9O_3NS$ *p*-Toluidine-*m*-sulphonic acid, salts of (Scott and Cohen), 2039.
$C_7H_9O_5N_3S$ *m*-Nitro-*p*-tolylhydrazinesulphonic acid, ammonium salt (Davies), 720.
$C_7H_9Cl_3IAs$ *ββ'β''*-Trichlorotrivinylmethylarsonium iodide (Mann and Pope), 1758.
$C_7H_{10}O_2Cl_2Te$ Tellurium 3-ethylacetylacetone dichloride (Morgan and Drew), 932.
$C_7H_{10}O_2Br_2Te$ Tellurium 3-ethylacetylacetone dibromide (Morgan and Drew), 934.
$C_7H_{10}O_2I_2Te$ Tellurium 3-ethylacetylacetone di-iodide (Morgan and Drew), 934.
$C_7H_{12}O_2N_2Br_2$ Diethylmalonbromoamide (Ingold, Sako, and Thorpe), 1192.
$C_7H_{17}O_4N_4Co$ Salicylatotetramminocobaltic hydroxide, salts of (Morgan and Smith), 1956.

7 V

$C_7H_5O_4NCl_2S$ 6-Chloro-5-nitro-*m*-toluenesulphonyl chloride (Davies), 789.
$C_7H_7O_4N_2BrS$ *p*-Bromophenylcarbamide-*o*-sulphonic acid, and its salts (Scott and Cohen), 2047.
$C_7H_6O_5NClS$ 6-Chloro-5-nitro-*m*-toluenesulphonic acid, metallic salts (Davies), 789.
$C_7H_6O_5N_4S_2Hg_3$ Substance, from *p*-chlorophenylthiocarbamide and mercuric nitrite (Ray and Das), 327.
$C_7H_7O_4N_2ClS$ 6-Chloro-5-nitro-*m*-toluenesulphonamide (Davies), 789.
$C_7H_{13}O_2N_2ClBr$ Chlorobromomalondiethylamide (West), 2201.

C_8 Group.

$C_8H_6O_3$ Aldehydobenzoic acids, solubility of (Sidgwick and Turner), 2256.
Phthalaldehydic acids, preparation of (Davies, Perkin, and Clayton), 2214.
C_8H_7Cl Chlorostyrene (Forster and Saville), 2600.
$C_8H_6O_4$ 5:5-Dimethyl-Δ^1-*cyclo*pentene-3:4-dione-1-carboxylic acid (Farmer, Ingold, and Thorpe), 148.
$C_8H_8O_5$ Anhydro-*αα*-dimethylaconitic acid (Farmer, Ingold, and Thorpe) 149.
Δ^{α}-Butene-*αδ*-dicarboxylic-*β*-acetic anhydride (Farmer), 2019.
$C_8H_{10}O_6$ Δ^{α}-Butene-*αδ*-dicarboxylic-*β*-acetic acids, and their silver salts (Farmer), 2019.
αα-Dimethylaconitic acid (Farmer, Ingold, and Thorpe), 149.
$C_8H_{11}N$ Dimethylaniline, hydroferrocyanide of (Cumming), 1297.
α-Phenylethylamine, hydroferrocyanide of (Cumming), 1294.
p-Xylidine, hydroferrocyanide of (Cumming), 1294.
$C_8H_{12}O_2$ 1-Methyl-1-ethyl*cyclo*pentane-3:4-dione (Dickens, Kon, and Thorpe), 1503.
$C_8H_{12}O_6$ *αβ*-Dimethyltricarballylic acid (Hope and Sheldon), 2230.
$C_8H_{12}N_2$ Dimethyl-*p*-phenylenediamine, hydroferrocyanide of (Cumming), 1296.
$C_8H_{14}O_6$ Ethyl tartrate, preparation and properties of (Lowry and Cutter), 532; green coloration of (Patterson), 1042.
$C_8H_{14}O_6$ Dimethylsaccharic acid, lead salt (Irvine and Hirst), 1223.
$C_8H_{14}O_6$ Dimethyl-*γ*-fructose (Irvine, Steele, and Shannon), 1074.

$C_8H_{18}O$ Methyl-*n*-hexylcarbinol, resolution of (KENYON), 2540.
$C_8H_{20}Sn$ Tin tetraethyl, action of thallic chloride on (D. and A. E. GODDARD), 259.

8 III

$C_8H_4OCl_4$ ω-Trichlorotoluoyl chlorides (DAVIES and PERKIN), 2212.
$C_8H_5OCl_3$ ω-Dichlorotoluoyl chlorides (DAVIES and PERKIN), 2211.
$C_8H_5O_2Cl$ Chlorocoumaran-2-ones (MINTON and STEPHEN), 1602.
$C_8H_5O_2Cl_3$ ω-Trichlorotoluic acids (DAVIES and PERKIN), 2213.
$C_8H_6OBr_2$ ω-Bromo-*o*-toluoyl bromide (DAVIES and PERKIN), 2207.
$C_8H_6O_2Cl_2$ ω-Dichlorotoluic acids (DAVIES and PERKIN), 2211.
$C_8H_7O_3Cl_3$ 2:2:4-Trichloro-5:5-dimethyl*dicyclo*pentan-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 155.
$C_8H_7O_5N$ *p*-Methoxybenzoic acid (FROELICHER and COHEN), 1656.
Nitrophenoxyacetic acids, preparation of (MINTON and STEPHEN), 1592.
$C_8H_8OCl_2$ Chlorostyrene chlorohydrin (FORSTER and SAVILLE), 2600.
$C_8H_8O_3Cl_2$ 2:4-Dichloro-5:5-dimethyl*dicyclo*pentan-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 155.
$C_8H_8O_3Br_2$ 2:4-Dibromo-5:5-dimethyl*dicyclo*pentan-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 153.
$C_8H_8O_3S$ 5-Methylthiolsalicylic acid (STEWART), 2560.
$C_8H_8O_4N_2$ Nitrophenoxyacetamides (MINTON and STEPHEN), 1593.
$C_8H_9ON_3$ Diacetylacetone semicarbazone (COLLIE and REILLY), 1985.
C_8H_9OBr Methoxybenzyl bromides, isomeric, preparation and properties of (LAPWORTH and SHOESMITH), 1391.
$C_8H_9O_2N$ *l*-Mandelamide, preparation and racemisation of (MCKENZIE and SMITH), 1353.
$C_8H_9O_2N_3$ *p*-Nitrobenzaldehydemethylhydrazone (BRADY and MCHUGH), 1652.
$C_8H_9O_3N$ 4-Amino-2-methoxybenzoic acid (FROELICHER and COHEN), 1656.
m-Aminophenoxyacetic acid (MINTON and STEPHEN), 1597.
Substance, from diacetylacetone and carbamide (COLLIE and REILLY), 1987.
$C_9H_9O_3Cl$ 2-Chloro-5:5-dimethyl*dicyclo*pentan-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 154.
$C_9H_9O_3Br$ 2-Bromo-5:5-dimethyl*dicyclo*pentan-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 153.
$C_9H_9O_4N$ 2:6-Dihydroxypyridine-4-propionic acid (FARMER), 2018.
4-Oximino-5:5-dimethyl-Δ^1-*cyclo*penten-3-one-1-carboxylic acid (FARMER, INGOLD, and THORPE), 148.
$C_9H_9O_4Br$ Methyl-α-bromomuconate (CHANDRASENA and INGOLD), 1317.
$C_9H_{10}ON_2$ *p*-Nitrosodimethylaniline, hydroferrocyanide of (CUMMING), 1297.
$C_9H_{10}OCl_2$ 4:5-Dichloro-1:1-dimethyl-Δ^4-*cyclo*hexen-3-one (HINKEL and WILLIAMS), 2500.
$C_9H_{10}O_2N_2$ *m*-Nitrodimethylaniline, preparation of nitro-derivatives of (FORSTER and COULSON), 1988.
$C_9H_{10}NBr$ *p*-Bromodimethylaniline, hydroferrocyanide of (CUMMING), 1297.
$C_9H_{11}ON$ Methyl-*m*-anisidine, preparation of (KERMACK, PERKIN, and ROBINSON), 1880.
$C_9H_{11}ON_3$ δ-Benzylsemicarbazide, and its hydrochloride (WILSON, HOPPER, and CRAWFORD), 868.
$C_9H_{11}O_2Cl$ Chlorodimethyldihydroresorcinol, action of phosphorus chlorides on (HINKEL and WILLIAMS), 2498.
$C_9H_{11}O_3Br$ Bromo-5:5-dimethyl*cyclo*pentan-3-one-2-carboxylic acids (FARMER, INGOLD, and THORPE), 158.

$C_8H_{11}N_3S$ *S*-Benzylthiosemicarbazone, salts of (Wilson and Burns), 874.
$C_8H_{12}ON_2$ *m*-Methoxyphenylmethylhydrazine, preparation of (Kermack, Perkin, and Robinson), 1880.
$C_8H_{12}O_4Br_2$ Methyl $\alpha\alpha'$-dibromo-β-methylglutarate (Ingold), 2686.
$C_8H_{13}O_4Br$ Methyl α-bromo-β-methylglutarate (Ingold), 2684.
$C_8H_{13}O_4I$ Methyl-α-iodo-β-methylglutarate (Ingold), 2685.
$C_8H_{14}O_{12}Sn_3$ Pentaformyl derivative of methylstannonic acid (Lambourne), 2538.
$C_8H_{11}O_3N_3$ *iso*Nitrosomalondimethylamide *n*- and *iso*-propyl ethers (Rendall and Whiteley), 2117.
$C_8O_4N_6S_2$ Substance, from potassium 2:5-dithiol-1:3:4-thiodiazole and chloropicrin (Rây and Das), 325.

8 IV

$C_8H_4O_2NK$ Potassium phthalimide, preparation of (Hammick and Locket), 2362.
$C_8H_4O_2NNa$ Sodium phthalimide, preparation of (Hammick and Locket), 2362.
$C_8H_6ONCl_3$ ω-Trichloro-*p*-toluamide (Davies and Perkin), 2214.
$C_8H_6O_2NCl$ Chlorocoumaran-2-one oximes (Minton and Stephen), 1602.
$C_8H_6O_4NCl$ Nitrophenoxyacetyl chlorides (Minton and Stephen), 1593.
$C_8H_7ONCl_2$ ω-Dichlorotoluamides (Davies and Perkin), 2211.
$C_8H_8O_2NCl$ Chlorophenoxyacetamides (Minton and Stephen), 1601.
$C_8H_9O_3N_2S$ Substance, from *p*-carbamidotoluene-*m*-sulphonic acid and phosphoryl chloride (Scott and Cohen), 2041.
$C_8H_{10}ON_2S$ Thiocarbamide-benzaldehyde, picrate of (Taylor), 2269
$C_8H_{10}O_2N_2S$ Thiocarbamide-salicylaldehyde, picrate of (Taylor), 2269.
$C_8H_{10}O_4N_2S$ *p*-Carbamidotoluene-*m*-sulphonic acid, and its salts (Scott and Cohen), 2039.
$C_8H_{10}O_6N_2S$ *N*-*m*-Nitrophenyl-β-aminoethyl hydrogen sulphate, and its nitroaniline salt (Saunders), 2674.
$C_8H_{11}O_4NS$ *N*-Phenyl-β-aminoethyl hydrogen sulphate (Saunders), 2671.

8 V

$C_8H_6O_5N_2ClS$ *p*-Chlorophenylbiuret-*o*-sulphonic acid, potassium salt ($+2H_2O$) (Scott and Cohen), 2048.
$C_8H_6O_5N_2BrS$ *p*-Bromophenylbiuret-*o*-sulphonic acid, and its salts (Scott and Cohen), 2045.
$C_8H_6O_5N_2IS$ *p*-Iodophenylbiuret-*o*-sulphonic acid, and its salts (Scott and Cohen), 2049.
$C_8H_{10}O_4NClS$ *N*-*p*-Chlorophenyl-β-aminoethyl hydrogen sulphate (Saunders), 2675.

C_9 Group.

C_9H_8 Indene, action of bromine water on (Read and Hurst), 2550.

9 II

C_9H_7N *iso*Quinoline (Harris and Pope), 1029.
Quinoline, separation from pyridine and hydroferrocyanides of (Cumming), 1298.
$C_9H_8O_2$ Cinnamic acid, condensation of resorcinol and (Short and Smith), 1808.
$C_9H_8O_4$ Methyl aldehydosalicylates, and their sodium salts (Wayne and Cohen), 1022.
$C_9H_8O_6$ Methanetetra-acetic anhydride (Ingold and Nickolls), 1647.

$C_9H_{10}O_3$ Homopiperonyl methyl ether (GREENE and ROBINSON), 2194.
Tropic acid, resolution of, and its salts (KING and PALMER), 2577.
$C_9H_{10}O_4$ 1-Hydroxy*cyclo*pentylethane-$\alpha\beta$-dicarboxylic lactone (BIRCH and THORPE), 1836.
$C_9H_{12}O_6$ Δ_α-Butene-$\alpha\delta$-dicarboxylic-β-malonic acid, sodium salt (FARMER), 2020.
$C_9H_{10}N_2$ Dinitrile of *cyclo*pentane*spirocyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1834.
$C_9H_{12}O_2$ *cyclo*Pentane*spirocyclo*pentane-3:4-dione (KON), 526.
$C_9H_{12}O_3$ Castelagenin (BOSMAN), 971.
Anhydride of *cis*-3:3-diethyl*cyclo*propane-1:2-dicarboxylic acid (DESHAPANDE and THORPE), 1437.
$C_9H_{12}O_5$ Trimethyltricarballylic anhydride (HOPE and SHELDON), 2235.
$C_9H_{12}O_8$ Methanetetra-acetic acid, and its salts (INGOLD and NICKOLLS), 1646.
*iso*Pentane-$\alpha\beta\delta\delta'$-tetracarboxylic acid (INGOLD and NICKOLLS), 1647.
$C_9H_{12}N_2$ Dinitrile of 1:1-diethyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1826.
$C_9H_{14}O$ *cyclo*Hexane*spirocyclo*butan-3-one (KON), 520.
4-*iso*Propylidene*cyclo*hexanone, reduction of (HENDERSON, ROBERTSON, and BROWN), 2721.
$C_9H_{14}O_2$ α-Campholytic acid, intra-annular tautomerism of (CHANDRASENA, INGOLD, and THORPE), 1542.
1:1-Diethyl*cyclo*pentane-3:4-dione (DICKENS, KON, and THORPE), 1506.
$C_9H_{14}O_3$ Ethyl 3-methyl*cyclo*butan-1-one-3-acetate (INGOLD), 1151.
$C_9H_{14}O_4$ *d*-3-Carboxy-1:1-dimethyl*cyclo*propane-2-propionic acid, and its copper salt (SIMONSEN), 2297.
1-Carboxy*cyclo*hexyl-1-acetic acid (LAPWORTH and MCRAE), 2754.
cis- and *trans*-3:3-Diethyl*cyclo*propane-1:2-dicarboxylic acids (DESHAPANDE and THORPE), 1437.
Ethyl ethylidenemalonate, preparation of γ-alkylidene derivatives of (HIGGINBOTHAM and LAPWORTH), 2823.
Homoterpenylic acid, preparation of (SIMONSEN), 2298.
$C_9H_{14}O_5$ 3:3-Diethyl*cyclo*propanol-1:2-dicarboxylic acid (DESHAPANDE and THORPE), 1440.
5:5-Dimethyl*cyclo*pentan-3-ol-1:2-dicarboxylic acid (FARMER, INGOLD, and THORPE), 152.
Hydroxy-lactonic acid, from hydrolysis of ethyl $\alpha\alpha'$-dibromo-$\beta\beta$-diethylglutarate (DESHAPANDE and THORPE), 1438.
δ-Keto-β-carboxy-$\gamma\gamma$-dimethylhexoic acid (CHANDRASENA, INGOLD, and THORPE), 1549.
α-Keto-$\beta\beta$-diethylglutaric acid, and its calcium salt (DESHAPANDE and THORPE), 1439.
$C_9H_{14}O_7$ Substance, from oxidation of trimethyl glucose (HAWORTH and LEITCH), 1929.
$C_9H_{16}O_4$ Azelaic acid, electro-synthesis of (CARMICHAEL), 2545.
$\gamma\delta$-Dihydroxydihydro-α-campholytic acid (CHANDRASENA, INGOLD, and THORPE), 1548.
α-Ethyl-$\beta\beta$-dimethylglutaric acid (KON and THORPE), 1800.
$C_9H_{18}O_2$ Nonoic acid, sodium salt, properties of solutions of (FLECKER and TAYLOR), 1101.
$C_9H_{18}O_5$ Trimethyl methylxyloside, preparation of (CARRUTHERS and HIRST), 2304.
$C_9H_{18}O_6$ 2:3:6-Trimethylglucose (IRVINE and HIRST), 1213.
$C_9H_{20}O_6$ 2:3:6-Trimethyl methylglucoside (IRVINE and HIRST), 1222.

9 III

$C_9H_6O_2N_2$ Nitrocinnamonitriles (Brady and Thomas), 2107.

$C_9H_6O_7Hg_2$ 4:5-Anhydro-3-acetoxymercuri-5-hydroxymercuri-4-hydroxybenzaldehyde (Henry and Sharp), 1058.

$C_9H_6O_8N_2$ Methyl dinitro-5-aldehydosalicylate (Wayne and Cohen), 1025.

$C_9H_7O_2Cl_3$ Methyl ω-trichlorotoluates (Davies and Perkin), 2213.

$C_9H_7O_4Br$ Methyl 5-bromoaldehydosalicylate (Wayne and Cohen), 1024.

$C_9H_7O_6N$ Methyl 5-nitroaldehydosalicylate (Wayne and Cohen), 1024.

$C_9H_8O_3N_2$ Nitrocinnam*anti*aldoximes (Brady and Thomas), 2107.

$C_9H_9O_4S_2$ 2-Carboxyphenyldithioglycollic acid (Smiles and McClelland), 88.

$C_9H_9O_4Hg$ Acetoxymercuri-*m*-hydroxybenzaldehyde (Henry and Sharp), 1059.

C_9H_9ON Cinnamaldoximes (Brady and Thomas), 2098.

6-Methoxyindole, and its picrate (Kermack, Perkin, and Robinson), 1879.

C_9H_9OBr Indene bromohydrin (Read and Hurst), 2552.

Bromohydroxyhydrindene (Read and Hurst), 2554.

$C_9H_9O_3N_3$ α-Triazo-β-hydroxy-β-phenylpropionic acid (Forster and Saville), 2600.

$C_9H_9O_3Cl$ Cinnamic acid chlorohydrin, preparation and reactions of (Forster and Saville), 2595.

$C_9H_9O_4N$ Methyl 5-aldehydosalicylate oxime (Wayne and Cohen), 1026.

$C_9H_9O_5N$ Methyl nitrophenoxyacetates (Minton and Stephen), 1593.

6-Nitrohomopiperonyl methyl ether (Greene and Robinson), 2194.

Nitrotolyloxyacetic acids (Minton and Stephen), 1594.

$C_9H_9O_5N_3$ Dinitroaceto-*m*-toluidides (Brady, Day, and Rolt), 532.

Dinitroaceto-*p*-toluidides (Scott and Robinson), 845.

$C_9H_{10}O_3N_2$ Nitroaceto-*m*-toluidides (Brady, Day, and Rolt), 529.

$C_9H_{10}O_4N_2$ 3-Carbamido-4-methoxybenzoic acid (Froelicher and Cohen), 1656.

Nitrotolyloxyacetamides (Minton and Stephen), 1595.

$C_9H_{11}OCl$ Benzyl β-chloroethyl ether (Clemo and Perkin), 649.

$C_9H_{11}O_2N$ *l*-Atrolactinamide, preparation and rotation of (McKenzie and Smith), 1356.

$C_9H_{11}O_2N_3$ *p*-Nitrobenzaldehydedimethylhydrazone, and its hydrochloride (Brady and McHugh), 1651.

$C_9H_{11}O_3N$ Aminotolyloxyacetic acids (Minton and Stephen), 1597.

$C_9H_{12}NCl$ β-Chloroethylmethylaniline (Clemo and Perkin), 648.

$C_9H_{13}ON_3$ δ-α-Phenylethylsemicarbazides, and their hydrochlorides (Wilson, Hopper, and Crawford), 869.

$C_9H_{13}O_4N$ Substance, from hydrolysis of ethyl βγ-dicyano-γ-methylbutane-βδ-dicarboxylate (Hope and Sheldon), 2232.

$C_9H_{13}O_4Cl$ Ethyl β-chloroglutaconate (Ingold and Nickolls), 1643.

$C_9H_{14}O_4Br_2$ αα′-Dibromo-ββ-diethylglutaric acid (Deshapande and Thorpe), 1436.

$C_9H_{16}O_2N_6$ 1:1-Dimethyl*cyclo*pentane-3:4-dione disemicarbazone (Kon), 524.

$C_9H_{17}O_2N_3$ Heptaldehydesemioxamazone (Lapworth and McRae), 2753.

$C_9H_{17}O_3N_3$ *iso*Nitrosomalondimethylamide *n*-butyl ether (Rendall and Whiteley), 2117.

$C_9H_{18}O_3Sn_2$ Triacetyl derivative of methylstannonic acid (Lambourne), 2537.

$C_9H_{19}O_6N$ Trimethyl glucoseoxime (IRVINE and HIRST), 1220.
$C_9H_{21}O_4N$ Methylaminobisdimethylacetal (KERMACK, PERKIN, and ROBINSON), 1886.

9 IV

$C_9H_6O_4N_2Cl_2$ Mesoxalic acid 2:4-dichlorophenylhydrazone (CHATTAWAY and HARRIS), 2708.
$C_9H_6O_4N_2Br_2$ Mesoxalic acid 2:4-dibromophenylhydrazone (CHATTAWAY and HARRIS), 2709.
$C_9H_7O_4N_2Cl$ Mesoxalic acid chlorophenylhydrazones (CHATTAWAY and HARRIS), 2708.
$C_9H_7O_4N_2Br$ Mesoxalic acid *p*-bromophenylhydrazone (CHATTAWAY and HARRIS), 2708.
$C_9H_7N_3Cl_2S$ Substance, from *p*-chlorophenylthiocarbamide and chloropicrin (RAY and DAS), 326.
$C_9H_8O_2N_2Cl$ Semicarbazones of chlorocoumaran-2-ones (MINTON and STEPHEN), 1602.
$C_9H_8O_3N_2Cl_2$ 2:6-Dichloro-3-nitroaceto-*p*-toluidide (DAVIES), 813.
$C_9H_8O_4NCl$ Nitrotolyloxyacetyl chlorides (MINTON and STEPHEN), 1594.
$C_9H_9ONCl_2$ Acetyl derivative of 2:6-dichloro-*p*-toluidine (DAVIES), 813.
$C_9H_{10}ONI$ Acetyl derivative of 6-iodo-*m*-toluidine (BURTON and KENNER), 680.
$C_9H_{10}O_3NCl$ *p*-Nitro-*o*-tolyl β-chloroethyl ether (CLEMO and PERKIN), 645.
$C_9H_{10}O_5N_2S$ *o*-Acetylcarbamidobenzenesulphonic acid, potassium salt ($+H_2O$) (SCOTT and COHEN), 2042.
$C_9H_{10}NIS$ Benzothiazole ethiodide (MILLS), 460.
$C_9H_{11}O_3ClS$ β-Chloroethyl toluene-*p*-sulphonate (CLEMO and PERKIN), 644.
$C_9H_{12}ON_2S$ Thiocarbamideacetone, picrate of (TAYLOR), 2272.
$C_9H_{13}O_4NS$ *N*-Phenyl-*N*-methyl-β-aminoethyl hydrogen sulphate (SAUNDERS), 2674.
N-*o*-Tolyl-β-aminoethyl hydrogen sulphate (SAUNDERS), 2673.

9 V

$C_9H_9O_5N_2BrS$ Acetyl-*p*-bromophenylcarbamide-*o*-sulphonic acid, potassium salt (SCOTT and COHEN), 2047.

C_{10} Group.

$C_{10}H_{12}$ Tetrahydronaphthalene, preparation of derivatives of (STEVENSON and THORPE), 1717.
$C_{10}H_{16}$ Sabinene, oxidation of, with chromyl chloride (HENDERSON, ROBERTSON, and BROWN), 2717.

10 II

$C_{10}H_6O_6$ 2:4-Dicarboxy*cyclo*butane-1:3-diacetic anhydride (INGOLD, PERREN, and THORPE), 1789.
$C_{10}H_8O_5$ Hydroxycarboxycinnamic acids (WAYNE and COHEN), 1028.
$C_{10}H_9N$ α- and β-Naphthylamines, hydroferrocyanides of (CUMMING), 1295.
$C_{10}H_{10}O_2$ *o*- and *p*-Hydroxystyryl methyl ketones (BUCK and HEILBRON), 1100.
$C_{10}H_{10}O_4$ Methyl 2-methoxy-5-aldehydobenzoate (WAYNE and COHEN), 1023.
Phenylsuccinic acid, preparation of (LAPWORTH and MCRAE), 1704.
$C_{10}H_{11}N$ 5:8-Dihydro-α-naphthylamine, oxidation and bromination of (ROWE and DAVIES), 1000.
$C_{10}H_{12}O$ Cuminaldehyde, from eucalyptus oil (PENFOLD), 266.

$C_{10}H_{12}O_6$ 1-Hydroxy*cyclo*pentylethane-$\alpha\alpha\beta$-tricarboxylic lactone (BIRCH and THORPE), 1835.

$C_{10}H_{12}O_8$ 2:4-Dicarboxy*cyclo*butane-1:3-diacetic acids (INGOLD, PERREN, and THORPE), 1789.

$C_{10}H_{14}O_2$ *cyclo*Hexane*spirocyclo*pentane-3:4-dione (KON), 522.

$C_{10}H_{14}O_3$ α-Keto-α-campholenic acid (CHANDRASENA and INGOLD), 1554.

$C_{10}H_{14}O_4$ Ethyl muconate, addition of ethyl sodiocyanoacetate and ethyl sodiomalonate to (FARMER), 2015.

$C_{10}H_{14}O_6$ γ-Hydroxy-γ-ethylpentane-$\alpha\alpha\beta$-tricarboxylic lactone (BIRCH and THORPE), 1826.

$C_{10}H_{16}O$ Cryptal, from eucalyptus oil (PENFOLD), 266.

Phellandral, from eucalyptus oil (PENFOLD), 266.

Piperitone (READ and SMITH), 574, 1863; (READ, SMITH, and BENTIVOGLIO), 582.

Sabinenilanaldehyde (HENDERSON, ROBERTSON, and BROWN), 2720.

$C_{10}H_{16}O_2$ 1:4-Dimethyl-1-ethyl*cyclo*hexane-3:5-dione (BECKER and THORPE), 1305.

Sabinenilanic acid, and its salts (HENDERSON, ROBERTSON, and BROWN), 2720.

$C_{10}H_{16}O_2$ *d*-1:1-Dimethyl-2-γ-ketobutyl*cyclo*propane-3-carboxylic acid, and its sodium salt (SIMONSEN), 2295.

$C_{10}H_{16}O_2$ Ethyl *n*-heptenecarboxylate (CARMICHAEL), 2549.

$C_{10}H_{16}O_4$ Methyl β-methyl-β-ethylglutarate (DICKENS, KON, and THORPE), 1503.

$C_{10}H_{16}O_4$ Ethyl butane-$\alpha\gamma$-diol-$\alpha\beta$-dicarboxylate (INGOLD), 2694.

$C_{10}H_{18}S_2$ $\alpha\alpha'$-Dimethyldi*iso*butenyl disulphide (POPE and SMITH), 1168.

$C_{10}H_{20}O_6$ 1:3:4:6-Tetramethyl fructose (IRVINE and PATTERSON), 2697.

Trimethyl methylglucoside (HAWORTH and LEITCH), 1928.

10 III

$C_{10}H_6O_6N_2$ 2:4-Dinitro-α-naphthol, cobaltammine salts of (MORGAN and KING), 1727.

$C_{10}H_8OS$ Hydroxynaphthyl mercaptans (WATSON and DUTT), 2416.

$C_{10}H_8O_2N_2$ 2:6-Dihydroxy-*m*-α-benzbispyrrole, and its sodium salt (DAVIES and HICKOX), 2652.

$C_{10}H_8O_8N_2$ 4:6-Dinitrophenylene-1:3-diacetic acid, and its lead salt (DAVIES and HICKOX), 2651.

$C_{10}H_8N_2S_2$ Dimethylbenzbisthiazoles, and their salts (EDGE), 774.

$C_{10}H_9ON$ 6-Methoxyindole-3-aldehyde (KERMACK, PERKIN, and ROBINSON), 1882.

$C_{10}H_9O_2Cl$ 3-Chlorobenzoylacetone (MORGAN, DREW, and BARKER), 2456.

$C_{10}H_9O_6N$ Methyl 6-nitropiperonylacetate (GREENE and ROBINSON), 2195.

$C_{10}H_{10}O_2N_2$ *cyclo*Pentane*spiro*-2:3-dicyano*cyclo*propane-2-carboxylic acid (BIRCH and THORPE), 1834.

Phenylcyanourethane (SCOTT and COHEN), 2050.

$C_{10}H_{10}O_2Cl_2$ Ethyl ω-dichlorotoluates (DAVIES and PERKIN), 2211.

$C_{10}H_{10}O_4N_2$ Mesoxalic acid tolylhydrazones (CHATTAWAY and HARRIS), 2709.

$C_{10}H_{11}ON_2$ *cyclo*Pentane*spiro*-2:3-dicyano*cyclo*propane-2-carboxylamide (BIRCH and THORPE), 1834.

$C_{10}H_{11}O_2Br$ Ethyl ω-bromo-*o*-toluate (DAVIES and PERKIN), 2207.

$C_{10}H_{11}O_2I$ Ethyl ω-iodo-*o*-toluate (DAVIES and PERKIN), 2208.

$C_{10}H_{11}O_2N_3$ Acetyl-*p*-nitrobenzaldehydemethylhydrazone (BRADY and MCHUGH), 1652.

α-Triazo-β-methoxy-β-phenylpropionic acid (FORSTER and SAVILLE), 2601.

$C_{10}H_{11}O_4N_3$ Semicarbazone of methyl 5-aldehydosalicylate (WAYNE and COHEN), 1026.

$C_{10}H_{11}O_5N$ Ethyl nitrophenoxyacetates (MINTON and STEPHEN), 1593.

Methyl nitrotolyloxyacetates (MINTON and STEPHEN), 1594.

$C_{10}H_{12}ON_2$ 2:3-Dicyano-1:1-diethyl*cyclo*propane-2-carboxylamide (BIRCH and THORPE), 1825.

$C_{10}H_{12}O_2N_2$ 2:3-Dicyano-1:1-diethyl*cyclo*propane-2-carboxylic acid (BIRCH and THORPE), 1825.

$C_{10}H_{13}O_3N$ *d*-1:1-Dimethyl-2-γ-ketobutyl*cyclo*propane-3-carboxylic acid oxime (SIMONSEN), 2296.

$C_{10}H_{14}O_4Se$ Selenium *OC*-bisacetylacetone (MORGAN, DREW, and BARKER), 2449.

$C_{10}H_{14}O_4Se_2$ Diselenium bisacetylacetone (MORGAN, DREW, and BARKER), 2444.

$C_{10}H_{15}OBr$ α-Bromocamphor (LOWRY, STEELE, and BURGESS), 633.

$C_{10}H_{15}O_5Br$ Ethyl γ-bromoacetylsuccinate, preparation of (HIRST and MACBETH), 2175.

$C_{10}H_{16}O_4Br_2$ Ethyl αα′-dibromo-β-methylglutarate (INGOLD), 2686.

$C_{10}H_{16}O_6Br_2$ Ethyl αβ-dibromo-γδ-dihydroxyadipate (CHANDRASENA and INGOLD), 1316.

$C_{10}H_{17}ON$ *dl*-Piperitoneoximes, and their hydrochlorides (READ, SMITH, and BENTIVOGLIO), 582.

$C_{10}H_{17}ON_3$ *cyclo*Hexane*spirocyclo*butan-3-one semicarbazone (KON), 520.

$C_{10}H_{17}O_2N$ *n*-Hexylsuccinimide (LAPWORTH and MCRAE), 2750.

$C_{10}H_{17}O_4I$ Ethyl α-iodo-β-methylglutarate (INGOLD), 2685.

$C_{10}H_{17}O_5N_3$ Semicarbazone of α-keto-ββ-diethylglutaric acid (DESHAPANDE and THORPE), 1440.

$C_{10}H_{18}O_2N_6$ Disemicarbazone of 1-methyl-1-ethyl*cyclo*pentane-3:4-dione (DICKENS, KON, and THORPE), 1504.

$C_{10}H_{19}O_2N$ Hexylsuccinamic acid (HIGGINBOTHAM and LAPWORTH), 52.

$C_{10}H_{20}Cl_2S_2$ ββ′-Dichloro-αα′-dimethyldi*iso*butyl disulphide (POPE and SMITH), 1167.

10 IV

$C_{10}H_6O_8N_2S$ 2:4-Dinitro-α-naphthol-7-sulphonic acid, cobaltammine salts of (MORGAN and KING), 1727.

$C_{10}H_7O_6N_3S_2$ Dinitrodithioacetoacetanilide (NAIK and AVASARE), 2594.

$C_{10}H_9O_7NS_2$ 8-Amino-α-naphthol-3:6-disulphonic acid, cobaltammine salt (MORGAN and MOSS), 2864.

$C_{10}H_8ONCl$ 3-Chloro-7-methoxyquinoline (KERMACK, PERKIN, and ROBINSON), 1883.

$C_{10}H_9O_2NS_2$ Dithioacetoacetanilide (NAIK and AVASARE), 2594.

$C_{10}H_9O_3NCl_2$ *p*-Chloroacetylaminophenyl chloroacetate (BARNETT and COOK), 795.

$C_{10}H_{10}O_6N_2BrS$ Acetyl-*p*-bromophenylbiuret-*o*-sulphonic acid, potassium salt (SCOTT and COHEN), 2046.

$C_{10}H_{12}ON_2S$ Thiocarbamidecinnamaldehyde, and its salts (TAYLOR), 2270.

$C_{10}H_{13}O_2NCl$ Acetylaminophenyl-β-chloroethyl ethers (CLEMO and PERKIN), 645.

$C_{10}H_{12}O_2N_4S_4$ Substance, from 2-thiol-4:5-dihydrothiazole and chloropicrin (RÂY and DAS), 325.

$C_{10}H_{12}O_4Cl_4Te$ Tellurium bischloroacetylacetone dichloride (MORGAN and DREW), 936.

$C_{10}H_{12}O_4Se_2Cu$ Copper diselenium bisacetylacetone (MORGAN, DREW, and BARKER), 2447.

$C_{10}H_{12}O_5N_2S$ *p*-Acetylcarbamidotoluene-*m*-sulphonic acid, potassium salt (SCOTT and COHEN), 2040.

$C_{10}H_{12}NIS$ Methylbenzothiazole ethiodides (MILLS), 460; (MILLS and BRAUNHOLTZ), 1493.

$C_{10}H_{14}ON_2S$ Phenylthiocarbamideacetone, picrate of (TAYLOR), 2272.

$C_{10}H_{14}O_4Cl_2Te$ Tellurium bisacetylacetone dichloride (MORGAN and DREW), 929.

$C_{10}H_{14}O_5N_2S$ *N*-*p*-Nitroso-*N*-ethyl-β-aminoethyl hydrogen sulphate (SAUNDERS), 2674.

$C_{10}H_{15}O_2NS_2$ Methylethylsulphine-*p*-toluenesulphonylimine (MANN and POPE), 1053.

$C_{10}H_{15}O_4NS$ *N*-Phenyl-*N*-ethyl-β-aminoethyl hydrogen sulphate (SAUNDERS), 2673.

$C_{10}H_{17}O_2Cl_3Te$ Tellurium *O*-ethylpivalylacetone trichloride (MORGAN and DREW), 938.

C_{11} Group.

$C_{11}H_{10}O_5$ Acetyl derivative of methyl 5-aldehydosalicylate (WAYNE and COHEN), 1022.

$C_{11}H_{10}O_6$ Piperonylsuccinic acid (LAPWORTH and MCRAE), 1707.

$C_{11}H_{16}O_3$ α-Methyl*cyclo*hexane-1:1-diacetic anhydride (KON and THORPE), 1801.

$C_{11}H_{16}N_2$ Benzaldehydediethylhydrazone, and its platinichloride (BRADY and MCHUGH), 1650.

$C_{11}H_{18}O_4$ α-Methyl*cyclo*hexane-1:1-diacetic acid (KON and THORPE), 1801.

Methyl*cyclo*pentane-1:1-diacetate (DICKENS, KON, and THORPE), 1502.

$C_{11}H_{18}O_5$ Ethyl ester of hydroxy-lactonic acid, $C_9H_{14}O_5$ (DESHAPANDE and THORPE), 1438.

$C_{11}H_{20}O_4$ Methyl ββ-diethylglutarate (DICKENS, KON, and THORPE), 1504.

11 III

$C_{11}H_7O_4N$ Nitro-2-hydroxy-α-naphthaldehyde (MORGAN and REEVES), 6.

$C_{11}H_7NS$ α-Naphthyl thiocyanate (CHALLENGER and WILKINSON), 100.

$C_{11}H_9O_2N$ Quinaldinic acid methyl betaine (MILLS and HAMER), 2011.

$C_{11}H_9O_2N_3$ Imide of *cyclo*pentane*spiro*-2:3-dicyano*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1834.

$C_{11}H_9O_3N$ 6-Amino-2-hydroxy-3-naphthoic acid (FROELICHER and COHEN), 1659.

$C_{11}H_{10}ON_2$ α-Cyano-γ-phenylcrotonamide (STEVENSON and THORPE), 1720.

$C_{11}H_{10}O_3N_2$ Substance, from α-ketoglutaric acid and *o*-phenylenediamine (KON, STEVENSON, and THORPE), 664.

$C_{11}H_{10}O_4N$ *m*-Acetylaminophenoxyacetic acid (MINTON and STEPHEN), 1597.

$C_{11}H_{10}O_4N_2$ Acetylcinnam*anti*aldoximes (BRADY and THOMAS), 2107.

$C_{11}H_{10}O_4N_2$ αβ-Dicyano-1-hydroxy*cyclo*pentylethane-αβ-dicarboxylic acid (BIRCH and THORPE), 1836.

Quinaldinic acid methonitrate (MILLS and HAMER), 2012

$C_{11}H_{10}O_6Hg_2$ 3:5-Diacetoxydimercuri-4-hydroxybenzaldehyde (HENRY and SHARP), 1058.

3:5-Diacetoxydimercurisalicylaldehyde (HENRY and SHARP), 1056.

$C_{11}H_{10}O_7N_2$ Dinitro-*m*-xylylpyruvic acid (DAVIES and HICKOX), 2646.

$C_{11}H_{11}O_3N$ Methoxy-1-methylindole-2-carboxylic acid (KERMACK, PERKIN, and ROBINSON), 1881.

$C_{11}H_{12}NI$ Methyl*iso*quinoline methiodides (MILLS and SMITH), 2732.

$C_{11}H_{13}O_3N$ Acetoacet-*o*- and -*p*-toluidides (NAIK and AVASARE), 2594.

$C_{11}H_{15}O_3N_3$ *N*-Methyl-ω-imide of *αα'*-dicyano-*αββ*-trimethylglutaric acid (KON and THORPE), 1799.

ω-Imide of *αα'*-dicyano-*ββ*-dimethyl-*α*-ethylglutaric acid (KON and THORPE), 1800.

$C_{11}H_{13}O_4N$ 2-Acetylamino-*p*-tolyloxyacetic acid (MINTON and STEPHEN), 1598.

$C_{11}H_{13}O_5N$ 3-Carbethoxyamino-4-methoxybenzoic acid (FROELICHER and COHEN), 1656.

Ethyl nitrotolyloxyacetates (MINTON and STEPHEN), 1594.

$C_{11}H_{14}O_3N_2$ Pyruvic acid *m*-methoxyphenylmethylhydrazone (KERMACK, PERKIN, and ROBINSON), 1881.

$C_{11}H_{14}O_5N_2$ *αβ*-Dicyano-*γ*-hydroxy-*γ*-ethylpentane-*αβ*-dicarboxylic acid (BIRCH and THORPE), 1827.

$C_{11}H_{15}ON_3$ Acetone-*δ*-benzylsemicarbazone (WILSON, HOPPER, and CRAWFORD), 867.

Substance, from *cyclo*hexane*spirocyclo*pentane-3:4-dione semicarbazone and mineral acids (KON), 522.

$C_{11}H_{15}O_2N_3$ *p*-Nitrobenzaldehydediethylhydrazone, and its salts (BRADY and MCHUGH), 1651.

$C_{11}H_{15}O_4N$ Ethyl *α*-cyano-*β*-methylglutaconate, and its action with ammonia and with water (HOPE), 2216.

$C_{11}H_{15}N_3S$ Acetone-*S*-benzylthiosemicarbazone (WILSON and BURNS), 873.

$C_{11}H_{17}O_2N_3$ Semicarbazone of *α*-keto-*α*-campholenic acid (CHANDRASENA and INGOLD), 1555.

$C_{11}H_{17}O_4N$ Ethyl *α*-cyano-*γ*-ethylglutaconate (INGOLD, PERREN, and THORPE), 1782.

$C_{11}H_{18}O_2N_6$ *cyclo*Pentane*spirocyclo*pentane-3:4-dione disemicarbazone (KON), 526.

$C_{11}H_{19}ON_3$ *dl*-Piperitone semicarbazones (READ and SMITH), 1866.

$C_{11}H_{19}O_3N_3$ Semicarbazone of *d*-1:1-dimethyl-2-*γ*-ketobutyl*cyclo*propane-3-carboxylic acid (SIMONSEN), 2295.

Semicarbazone of methyl 1:1-diethyl*cyclo*butan-3-one-2-carboxylate (DICKENS, KON, and THORPE), 1504.

$C_{20}H_{20}O_2N_6$ Disemicarbazone of 1:1-diethyl*cyclo*pentane-3:4-dione (DICKENS, KON, and THORPE), 1506.

$C_{11}H_{21}O_3N_3$ Semicarbazido-*dl*-piperitone, and its hydrochloride (READ and SMITH), 1869.

11 IV

$C_{11}H_8O_2N_2Cl_2$ Citraconyl-2:4-dichlorophenylhydrazides (CHATTAWAY and PARKES), 287.

$C_{11}H_8O_2N_2Br_2$ *α*-Citraconyl-2:4-dibromophenylhydrazide (CHATTAWAY and PARKES), 287.

$C_{11}H_9O_2NSe$ Cyano-3-selenium benzoylacetone (MORGAN, DREW, and BARKER), 2455.

$C_{11}H_9O_2N_2Cl$ Citraconylchlorophenylhydrazides (CHATTAWAY and PARKES), 286.

$C_{11}H_9O_2N_3Br$ Citraconylbromophenylhydrazides (CHATTAWAY and PARKES), 287.
$C_{11}H_9O_6N_3S_2$ Dinitrodithioaceto-*p*-toluidide (NAIK and AVASARE), 2595.
$C_{11}H_{10}O_3NCl$ Quinaldinic acid methochloride (MILLS and HAMER), 2012.
$C_{11}H_{11}O_2NS_2$ Dithioacetoaceto-toluidides (NAIK and AVASARE), 2594.
$C_{11}H_{11}O_3N_2Cl$ Citraconic acid *p*-chlorophenylhydrazide (CHATTAWAY and PARKES), 285.
$C_{11}H_{11}O_3N_2Br$ Citraconic acid *p*-bromophenylhydrazide (CHATTAWAY and PARKES), 286.
$C_{11}H_{13}NIS$ Phenylmethylthiazole methiodides (MILLS and SMITH), 2735, 2737.
$C_{11}H_{12}O_4N_2Cl$ *p*-Chlorophenylhydrazine citraconate (CHATTAWAY and PARKES), 285.
$C_{11}H_{14}NIS$ 1:5-Dimethylbenzothiazole ethiodide (MILLS), 463.
$C_{11}H_{17}O_2NS_2$ Diethylsulphine-*p*-toluenesulphonylimine (MANN and POPE), 1053.

11 V

$C_{11}H_{15}O_3NCl_2S_2$ $\beta\beta'$-Dichlorodiethylsulphine-*p*-toluenesulphonylimine (MANN and POPE), 1053.

C_{12} Group.

$C_{12}H_7N_3$ Carbazole-3-diazoimine (MORGAN and READ), 2712.
$C_{12}H_8N_4$ 3-Triazocarbazole (MORGAN and READ), 2714.
$C_{12}H_{10}O_3$ Methoxynaphthoic acids, preparation of (FROELICHER and COHEN), 1656.
$C_{12}H_{16}N_2$ Harmine (KERMACK, PERKIN, and ROBINSON), 1872.
$C_{12}H_{10}Pb$ Lead diphenyl, salts of, with organic acids (GODDARD, ASHLEY, and EVANS), 981.
$C_{12}H_{12}O_3$ Ethyl 2-hydrindone-1-carboxylate (PERKIN and TITLEY), 1566.
ac-1-Ketotetrahydronaphthalene-3-acetic acid (STEVENSON and THORPE), 1721.
$C_{12}H_{12}O_5$ Acetoxybenzanthronecarboxylic acid (BRADSHAW and PERKIN), 914.
$C_{12}H_{12}O_{10}$ $\gamma\xi$-Dihydroxy-$\Delta^{\alpha\delta\eta}$-octatriene-$\alpha\delta\epsilon\theta$-tetracarboxylic acid (CHANDRASENA and INGOLD), 1319.
$C_{12}H_{12}N_2$ Benzidine, hydroferrocyanide of (CUMMING), 1296.
$C_{12}H_{16}O_4$ Methyl 1-methyl-1-ethyl*cyclo*pentane-3:4-dione-2:5-dicarboxylate (DICKENS, KON, and THORPE), 1503.
$C_{12}H_{16}O_5$ *cis*- and *trans*-2:4-Dicarboxy*cyclo*butane-1:3-di-α-propionic acids (INGOLD, PERREN, and THORPE), 1787.
$C_{12}H_{18}N_2$ Dinitrile of 1-methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1828.
$C_{12}H_{18}O_3$ *cis*-1-Methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylic anhydride (BIRCH and THORPE), 1829.
$C_{12}H_{20}O_3$ Ethyl *d*-1:1-dimethyl-2-γ-ketobutyl*cyclo*propane-3-carboxylate (SIMONSEN), 2297.
$C_{12}H_{16}O_4$ α-Ethyl*cyclo*hexane-1:1-diacetic acid (KON and THORPE), 1802.
γ-Hydroxy-γ-methylnonane-$\alpha\beta$-dicarboxylic lactone (BIRCH and THORPE), 1830.
Methyl *cyclo*hexane-1:1-diacetate (DICKENS, KON, and THORPE), 1505.
cis- and *trans*-1-Methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylic acids (BIRCH and THORPE), 1829.
$C_{12}H_{20}O_6$ Methyl trimethyltricarballylate (HOPE and SHELDON), 2235.

$C_{12}H_{22}O_{11}$ Sucrose, inversion of (Moran and Lewis), 1613; oxidation of, by nitric acid (Chattaway and Harris), 2703.

$C_{12}H_{24}O_2$ Lauric acid, potassium salt, ultra-filtration of solutions of (McBain and Jenkins), 2325; sodium salt, equilibrium of sodium chloride, water, and (McBain and Burnett), 1320.

12 III

$C_{12}H_5O_{12}N_7$ Dipicrylamine, cobaltammine salts of (Morgan and King), 1726.

$C_{12}H_9ON_3$ *N*-Nitrosocarbazole (Morgan and Read), 2712.

$C_{12}H_9ON_3$ Carbazole-3-diazonium hydroxide, salts of (Morgan and Read), 2711.

$C_{12}H_9O_5N$ 4-Nitro-1-methoxy-2-naphthoic acid (Froelicher and Cohen), 1657.

$C_{12}H_9N_2Cl$ 3-Chloro-1-methyl-4-carboline (Kermack, Perkin, and Robinson), 1885.

$C_{12}H_{10}O_2S_2$ Di-*m*-hydroxyphenyl disulphide (Watson and Dutt), 2415.

$C_{12}H_{10}O_3N_2$ Benzeneazohydroxyquinol (Mukerji), 551.

$C_{12}H_{10}O_4N_2$ 6-Carbamido-2-hydroxy-3-naphthoic acid (Froelicher and Cohen), 1660.

$C_{12}H_{10}O_5N_4$ *p*-Nitrobenzenehydrazo-*o*-nitrophenol (Mukerji), 2881.

$C_{12}H_{10}ClTl$ Thallium diphenyl chloride (Goddard), 40.

$C_{12}H_{10}BrTl$ Thallium diphenyl bromide (D. and A. E. Goddard), 258.

$C_{12}H_{11}ON$ $\alpha\beta$-Naphthadihydro*iso*oxazine (Clemo and Perkin), 647.

$C_{12}H_{11}OCl$ α- and β-Naphthyl β-chloroethyl ethers (Clemo and Perkin), 646.

$C_{12}H_{11}O_2N$ Quinaldinic acid ethyl betaine (Mills and Hamer), 2014.

$C_{12}H_{11}O_3N$ Aminomethoxynaphthoic acids (Froelicher and Cohen), 1658.

$C_{12}H_{12}O_2N_2$ Citraconyltolylhydrazides (Chattaway and Parkes), 288.

$C_{12}H_{12}N_2S$ 4-Benzeneazo-1-naphthyl mercaptan (Watson and Dutt), 1940.

$C_{12}H_{13}ON$ Ethoxyquinaldines, and their salts (Braunholtz), 170.

$C_{12}H_{13}O_{10}Br$ δ-Bromo-$\gamma\xi$-dihydroxy-$\Delta^{\alpha\eta}$-octadiene-$\alpha\delta\epsilon\theta$-tetracarboxylic acid (Chandrasena and Ingold), 1318.

$C_{12}H_{14}O_3N_2$ Citraconic acid *o*-tolylhydrazide (Chattaway and Parkes), 287.

$C_{12}H_{16}O_4N_2$ Ethyl $\alpha\beta$-dicyano-β-methylglutarate, preparation of (Hope and Sheldon), 2226.

$C_{12}H_{16}O_6Br_2$ Ethyl dibromodiacetylsuccinate, preparation of (Hirst and Macbeth), 2175.

$C_{12}H_{17}ON_3$ Acetone-δ-α-phenylethylsemicarbazones (Wilson, Hopper, and Crawford), 869.

$C_{12}H_{18}O_4Se$ Selenium *C*-ethyl-*OC*-bisacetylacetone (Morgan, Drew, and Barker), 2451.

$C_{12}H_{19}ON_3$ 2:3-Dicyano-1-methyl-1-*n*-hexyl*cyclo*propane-2-carboxylamide (Birch and Thorpe), 1827.

$C_{12}H_{20}O_2N_4$ *cyclo*Hexane*spirocyclo*pentane-3:4-dione disemicarbazone (Kon), 522.

$C_{12}H_{21}O_3N$ Amide of *trans*-1-methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylic acid (Birch and Thorpe), 1828.

$C_{12}H_{22}O_2N_2$ *trans*-1-Methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylamide (Birch and Thorpe), 1828.

12 IV

$C_{12}H_8O_6N_2Mg$ Magnesium nitrophenoxides (Goddard and Ward), 264.

$C_{12}H_8O_7N_2Pb_2$ Lead *m*- and *p*-nitrophenoxide (GODDARD and WARD), 264.
$C_{12}H_8Cl_2BrBi$ Di-*p*-chlorophenylbromobismuthine (CHALLENGER and RIDGWAY), 110.
$C_{12}H_8Cl_2IBi$ Di-*p*-chlorophenyl odobismuthine (CHALLENGER and RIDGWAY), 110.
$C_{12}H_9ON_2Cl$ 4′-Chloro-2-benzeneazophenol (CHATTAWAY and HILL), 2757.
$C_{12}H_9ON_2Br$ 4′-Bromo-2-benzeneazophenol (CHATTAWAY and HILL), 2758.
$C_{12}H_9ON_2I$ 4′-Iodo-2-benzeneazophenol (CHATTAWAY and HILL), 2758.
$C_{12}H_9ON_2S$ Diphenyl-4:4′-bisazohydroxy-2 phenyl mercaptan (WATSON and DUTT), 2415.
$C_{12}H_9O_3N_3S$ 3-Nitro-4-thiolbenzeneazo-4-hydroxy-2-phenyl mercaptan (WATSON and DUTT), 2417.
$C_{12}H_{10}O_3NCl$ 1-Nitro-β-naphthyl β-chloroethyl ether (CLEMO and PERKIN), 646.
$C_{12}H_{12}ONCl$ 1-Amino-β-naphthyl β-chloroethyl ether (CLEMO and PERKIN), 647.
$C_{12}H_{13}ONBr$ 4-Bromo-5:8-dihydroaceto-α-naphthalide (ROWE and DAVIES), 1006.
$C_{12}H_{12}ONBr_3$ 4:6:7-Tribromotetrahydroaceto-α-naphthalide (ROWE and DAVIES), 1006.
$C_{12}H_{13}O_3NCl$ Quinaldinic acid ethochloride (MILLS and HAMER), 2013.
$C_{12}H_{12}O_2NI$ Methyl quinaldinate methiodide (MILLS and HAMER), 2011.
$C_{12}H_{13}ONBr_2$ 6:7-Dibromotetrahydroaceto-α-naphthalide (ROWE and DAVIES), 1005.
$C_{12}H_{13}O_4NS$ *N*-α-Naphthyl-β-aminoethyl hydrogen sulphate (SAUNDERS), 2675.

12 V

$C_{12}H_{12}O_4N_2Se_2Cu$ Copper cyano-3-selenium acetylacetone (MORGAN, DREW, and BARKER), 2448.

C_{13} Group.

$C_{13}H_8O_4$ 1:3-Dihydroxyxanthone (+H_2O) (NISHIKAWA and ROBINSON), 841.
$C_{13}H_8N_4$ Carbazole-3-diazocyanide (MORGAN and READ), 2714.
$C_{13}H_{10}O_5$ Tetrahydroxybenzophenones (NISHIKAWA and ROBINSON), 842.
Substance, from oxidation of the lactone of 3-hydroxy-2-*o*-carboxybenzyl-2-methyl*cyclo*propane-1-carboxylic acid (KON, STEVENSON, and THORPE), 663.
$C_{13}H_{10}Cl_2$ Benzophenone chloride, action of sodium methoxide and its homologues on (MACKENZIE), 1695.
$C_{13}H_{12}O_3$ *cis*-1-Benzyl-1-methyl*cyclo*propane-2:3-dicarboxylic anhydride (BIRCH and THORPE), 1833.
$C_{13}H_{12}O_4$ Lactone of 3-hydroxy-2-*o*-carboxybenzyl-2-methyl*cyclo*propane-1-carboxylic acid, and its silver salt (KON, STEVENSON, and THORPE), 662.
Lactone of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic acid, and its silver salt (KON, STEVENSON, and THORPE), 660.
$C_{13}H_{12}O_5$ *p*-Methoxycinnamylidenemalonic acid (HIGGINBOTHAM and LAPWORTH), 2828.
$C_{13}H_{12}O_8$ Methylenebis-2:3:5:6-tetrahydroxybenzene (MUKERJI), 549.
$C_{13}H_{12}N_2$ Dinitrile of *trans*-1-benzyl-1-methyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1831.
$C_{13}H_{14}O_3$ Ethyl 1-methyl-2-hydrindone-1-carboxylate (PERKIN and TITLEY), 1569.

$C_{13}H_{14}O_4$ *cis*- and *trans*-1-Benzyl-1-methyl*cyclo*propane-2:3-dicarboxylic acids (BIRCH and THORPE), 1832.

γ-Hydroxy-γ-benzylbutane-αβ-dicarboxylic lactone (BIRCH and THORPE), 1833.

$C_{13}H_{14}O_6$ α-*o*-Carboxybenzyl-α-methylsuccinic acid (KON, STEVENSON, and THORPE), 662.

$C_{13}H_{16}N_2$ Quinoxaline derivative of 1:1-dimethyl*cyclo*pentane-3:4-dione (KON), 524.

$C_{13}H_{16}O_4$ Ethyl homophthalate, preparation of (DAVIES and PERKIN), 2208.

$C_{13}H_{16}O_6$ Methyl *cyclo*pentane*spirocyclo*pentane-3:4-dione-2:5-dicarboxylate (DICKENS, KON, and THORPE), 1502.

$C_{13}H_{20}O_4$ Ethyl 1:4-dimethyl-1-*cyclo*hexane-3:5-dione-2-carboxylate (BECKER and THORPE), 1304.

$C_{13}H_{20}O_6$ γδ-Diacetoxydihydro-α-campholytic acid (CHANDRASENA, INGOLD, and THORPE), 1549.

Ethyl *iso*butylenetricarboxylate (INGOLD and NICKOLLS), 1645.

$C_{13}H_{22}O_5$ Ethyl 3:3-diethyl*cyclo*propanol-1:2-dicarboxylate (DESHAPANDE and THORPE), 1441.

13 III

$C_{13}H_7O_4N$ Nitro-β-naphthacoumarin (MORGAN and REEVES), 7.

$C_{13}H_8O_7N_4$ 2:4-Dinitrobenzaldoxime-*N*-nitrophenyl ethers (BARROW, GRIFFITHS, and BLOOM), 1716.

$C_{13}H_9O_4N_3$ *m*- and *p*-Nitrobenzylidenenitroanilines (INGOLD and PIGGOTT), 2799.

$C_{13}H_9O_5N_3$ Dinitrobenzaldoxime-*N*-phenyl ethers (BARROW, GRIFFITHS, and BLOOM), 1714.

2:4-Dinitrobenzanilide (BARROW, GRIFFITHS, and BLOOM), 1714.

m-Nitrobenzeneazosalicylic acid, chromic and cobaltammine salts of (MORGAN and SMITH), 2870.

$C_{13}H_{10}O_2N_2$ Benzylidene-*o*-nitroaniline (INGOLD and PIGGOTT), 2804.

$C_{13}H_{10}O_3N_2$ *p*-Hydroxybenzylidene-*m*-nitroaniline (INGOLD and PIGGOTT), 2799.

$C_{13}H_{10}NBi$ Diphenylcyanobismuthine (CHALLENGER and WILKINSON), 98.

$C_{13}H_{11}O_4N$ 2:4:6:2′-Tetrahydroxydiphenyl ketimine, and its hydrochloride (NISHIKAWA and ROBINSON), 840.

$C_{13}H_{11}O_4N$ 2-Carboxyindole-1:3-diacetic acid (KERMACK, PERKIN, and ROBINSON), 1893.

$C_{13}H_{13}ON_3$ 5-Keto-4:7-dimethyl-4:5-dihydroindolediazine(1:4) (KERMACK, PERKIN, and ROBINSON), 1888.

2-*o*-Tolueneazophenol (CHATTAWAY and HILL), 2758.

$C_{13}H_{13}O_2N_3$ 11-Methoxy-3-keto-4-methyl-3:4-dihydro-4-carboline (KERMACK, PERKIN, and ROBINSON), 1889.

11-Methoxy-5-keto-4-methyl-4:5-dihydroindolediazine(1:4) (KERMACK, PERKIN, and ROBINSON), 1890.

$C_{13}H_{12}O_4N_2$ Carbamido-1-methoxynaphthoic acids (FROELICHER and COHEN), 1658.

$C_{13}H_{13}O_2N$ Imide of 1-benzyl-1-methyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1832.

$C_{13}H_{13}O_4N$ Oxime of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic lactone (KON, STEVENSON, and THORPE), 662.

$C_{13}H_{13}O_4N_3$ Nitroacetanilide-ω-pyridinium hydroxides, salts of (BARNETT and COOK), 794.

$C_{13}H_{14}ON_2$ Harmaline (KERMACK, PERKIN, and ROBINSON), 1872.

$C_{13}H_{14}O_2N_2$ Acetanilide-ω-pyridinium hydroxide, salts of (BARNETT and COOK), 794.

$C_{13}H_{14}O_3N_2$ Substance, from αα-dihydroxy-ββ-dimethylglutaric acid and *o*-phenylenediamine (KON, STEVENSON, and THORPE), 665.

$C_{13}H_{14}O_4N_2$ 2:3:5-Triketo-6-α-methoxybenzyl-1(or 4)-methylpiperazine (FORSTER and SAVILLE), 824.

$C_{13}H_{14}O_8N_2$ αβ-Dicyano-1-hydroxy-3- and -4-methyl*cyclo*hexylethane-αβ-dicarboxylic acids (BIRCH and THORPE), 1836.

$C_{13}H_{15}O_3N_3$ Semicarbazone of *ac*-1-ketotetrahydronaphthalene-3-acetic acid (STEVENSON and THORPE), 1721.

$C_{13}H_{15}N_4S_2$ 2:2′:4:4′-Tetra-amino-5:5′-dithioldiphenylmethane (WATSON and DUTT), 1943.

$C_{13}H_{16}ON_2$ *N*-Methyltetrahydronorharmine (KERMACK, PERKIN, and ROBINSON), 1891.

$C_{13}H_{16}O_3N_2$ Indole-2-carboxydimethylacetalylamide (KERMACK, PERKIN, and ROBINSON), 1892.

$C_{13}H_{17}O_3N_3$ *N*-Ethyl-ω-imide of αα′-dicyano-ββ-dimethyl-α-ethylglutaric acid (KON and THORPE), 1800.

$C_{13}H_{17}O_6N$ Salicylidene glucosamine (IRVINE and EARL), 2378.

$C_{13}H_{18}O_2N_2$ 2:3-Dicyano-1-methyl-1-*n*-hexyl*cyclo*propane-2-carboxylic acid, and its silver salt (BIRCH and THORPE), 1827.

$C_{13}H_{18}O_4N_2$ Ethyl dicyanomethylbutanedicarboxylates (HOPE and SHELDON), 2229, 2232.

$C_{13}H_{21}ON$ β-Benzyloxytriethylamine (CLEMO and PERKIN), 649.

$C_{13}H_{21}O_4N_2$ Ethyl piperidinomethylenemalonate (INGOLD, PERREN, and THORPE), 1785.

$C_{13}H_{21}O_8N$ 3:5:6-Triacetyl-1-methyl glucosamine (IRVINE and EARL), 2381.

$C_{13}H_{22}O_4Br_2$ Ethyl αα′-dibromo-ββ-diethylglutarate (DESHAPANDE and THORPE), 1436.

$C_{13}H_{23}O_3N_3$ Semicarbazone of ethyl *d*-1:1-dimethyl-2-γ-ketobutyl*cyclo*propane-3-carboxylate (SIMONSEN), 2297.

$C_{13}H_{14}O_{12}Sn_2$ Penta-acetyl derivative of methylstannonic acid (LAMBOURNE), 2537.

13 IV

$C_{13}H_9O_3N_2Br$ *m*-Nitrobenzylidene-*p*-bromoaniline (INGOLD and PIGGOTT), 2800.

$C_{13}H_{10}ONBr$ *p*-Hydroxybenzylidene-*p*-bromoaniline (INGOLD and PIGGOTT), 2798.

$C_{13}H_{10}NSBi$ Diphenylthiocyanobismuthine (CHALLENGER and WILKINSON), 98.

$C_{13}H_{13}O_2NCl$ Phenyl acetate ω-pyridinium chloride (+$5H_2O$) (BARNETT and COOK), 797.

$C_{13}H_{13}O_7N_2Cl$ Ethyl 5-chloro-2:4-dinitro-6-methylphenylacetoacetate (DAVIES and HICKOX), 2647.

$C_{13}H_{19}O_{11}Cl_5Sn_2$ Chloroacetyl derivative of methylstannonic acid (LAMBOURNE), 2538.

13 VI

$C_{13}H_{13}O_3NCl_3SAs$ ββ′β″-Trichlorotrivinylarsine-*p*-toluenesulphonylimine (MANN and POPE), 1758.

C_{14} Group.

$C_{14}H_{10}$ Phenanthrene, solubility of, in organic solvents (HENSTOCK), 2124.

14 II

$C_{14}H_8O_7$ 1:2:4-Trioxy-5:8-dihydroxyanthraquinone, amminocobaltic salt (MORGAN and SMITH), 168.

$C_{14}H_8O_4$ 1:2-Dioxyanthraquinone, 2-pentammino-1:2-dicobaltic salt (MORGAN and SMITH), 166.

$C_{14}H_8O_5$ 1:2-Dioxyhydroxyanthraquinones, cobalt and amminocobalt salts (MORGAN and SMITH), 166.

$C_{14}H_8O_6$ 1:2-Dioxy-5:8-dihydroxyanthraquinone, 2-pentammino-1:2-dicobaltic salt (MORGAN and SMITH), 167.

$C_{14}H_8O_2$ 2-Hydroxyanthraquinone, reduction of (PERKIN and WHATTAM), 289.

$C_{14}H_8Cl_2$ Dichloroanthracene, preparation of (BARNETT, COOK, and GRAINGER), 2068.

$C_{14}H_8Br_2$ Dibromoanthracene, preparation of (BARNETT, COOK, and GRAINGER), 2065.

$C_{14}H_{14}O_2$ Diacetylacetone, preparation of, and its salts (COLLIE and REILLY), 1984.

$C_{14}H_{14}O_5$ Substance, from ethyl 5-aldehydosalicylate and acetylacetone (WAYNE and COHEN), 1027.

$C_{14}H_{14}O_6$ γ-Hydroxy-γ-benzylbutane-$\alpha\alpha\beta$-tricarboxylic lactone (BIRCH and THORPE), 1833.

$C_{14}H_{16}N_2$ *o*-Tolidine, hydroferrocyanide of (CUMMING), 1296.

$C_{14}H_{18}O_4$ Diethyl *o*-phenylenediacetate (PERKIN and TITLEY), 1565.

$C_{14}H_{20}O_6$ Tetra-acetylaceritol (PERKIN and UYEDA), 71.

$C_{14}H_{24}O_4$ Menthyl hydrogen succinate (SHIMOMURA and COHEN), 2056.

$C_{14}H_{24}O_6$ Ethyl β-methylmethanetriacetate (INGOLD), 1149.

14 III

$C_{14}H_9O_6N$ 1:2-Dioxy-3-nitroanthraquinone, 2-pentammino-1:2-dicobaltic salt (MORGAN and SMITH), 166.

$C_{14}H_8O_7S$ 1:2-Dioxyanthraquinone-3-sulphonic acid, 2:3-dipentammino-1:2:3-tricobaltic salt (MORGAN and SMITH), 167.

$C_{14}H_8O_{12}N_4$ 4:6:4′:6′-Tetranitrodiphenic acid, resolution of, and its salts (CHRISTIE and KENNER), 614.

$C_{14}H_7O_8N$ 1:2-Dioxy-3-aminoanthraquinone, 2-tetrammino-1:2-dicobaltic salt (MORGAN and SMITH), 168.

$C_{14}H_8O_4N_2$ Dinitroanthracene, preparation of (BARNETT, COOK, and GRAINGER), 2065.

$C_{14}H_8O_6N_2$ 2:4-Dinitrobenzil (BISHOP and BRADY), 2368.

$C_{14}H_8O_8N_2$ γ-6:6′-Dinitrodiphenic acid, resolution of, and its salts (CHRISTIE and KENNER), 614.

$C_{14}H_8O_8N_4$ Tetranitrostilbenes (BISHOP and BRADY), 2367.

$C_{14}H_9O_6N_3$ 2:4-Dinitrobenzilmonoximes (BISHOP and BRADY), 2368.

$C_{14}H_{10}O_4S_2$ *p*-Disulphidobenzoic acid (SMILES and HARRISON), 2022.

$C_{14}H_{10}O_5N_2$ Benzeneazo-4-oxybenzenedicarboxylic acid, cobaltammine salts of (MORGAN and SMITH), 2872.

$C_{14}H_{11}O_4N_3$ Nitrobenzylidenenitrobenzylamines (INGOLD and PIGGOTT), 2386, 2801.

$C_{14}H_{11}O_5N_3$ 2:4-Dinitrobenzaldoxime-*N*-tolyl ethers (BARROW, GRIFFITHS, and BLOOM), 1715.

$C_{14}H_{12}O_2N_2$ Benzylidenenitrobenzylamines, and Nitrobenzylidene benzylamines (INGOLD and PIGGOTT), 2385.

$C_{14}H_{12}O_4N_2$ Nitrophenoxyacetanilides (MINTON and STEPHEN), 1594.

$C_{14}H_{12}O_5N_4$ 2:4-Dinitrobenzaldoxime-*N*-*p*-methylaminophenyl ether (Barrow, Griffiths, and Bloom), 1716.

$C_{14}H_{13}ON_3$ 2:3-Dicyano-1-benzyl-1-methyl*cyclo*propane-2-carboxylamide (Birch and Thorpe), 1830.

N-Ethylcarbazole-3-diazonium hydroxide, salts of (Morgan and Read), 2715.

$C_{14}H_{14}O_2S_2$ Benzyl disulphoxide, decomposition of (Smythe), 1406.

$C_{14}H_{14}N_4S$ 3-Amino-7-dimethylamino-4-thiolphenazine (Watson and Dutt), 1941.

$C_{14}H_{14}ClTl$ Thallium di-*o*- and -*p*-tolyl chlorides (D. and A. E. Goddard), 258.

$C_{14}H_{14}BrTl$ Thallium di-*p*-tolyl bromide (D. and A. E. Goddard), 258.

$C_{14}H_{14}ClBi$ Di-*p*-tolylchlorobismuthine (Challenger and Ridgway), 113.

$C_{14}H_{15}ON$ β-Phenoxyethylaniline (Clemo and Perkin), 645.

$C_{14}H_{15}O_4N_3$ Semicarbazone of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic lactone (Kon, Stevenson, and Thorpe), 662.

$C_{14}H_{16}O_2N_2$ Aceto-*o*- and -*p*-toluidide-ω-pyridinium hydroxides, salts of (Barnett and Cook), 794.

o-Dianisidine, hydroferrocyanide of (Cumming), 1296.

$C_{14}H_{16}O_3N_2$ Substance, from α-keto-ββγ-trimethylsuccinic acid and *o*-phenylenediamine (Kon, Stevenson, and Thorpe), 664.

$C_{14}H_{16}O_4N_2$ 2:3:5-Triketo-6-α-methoxybenzyl-1:4-dimethylpiperazine (Forster and Saville), 824.

Diamide of 1-benzyl-1-methyl*cyclo*propane-2:2:3-tricarboxylic acid (Birch and Thorpe), 1831.

$C_{14}H_{17}ON$ β-Naphthyl-β-dimethylaminoethyl ether, hydrochloride of (Clemo and Perkin), 646.

$C_{14}H_{17}O_2N_3$ ω-Imide of *aa'*-dicyano-*aa'*-dimethyl*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1802.

ω-Imide of *aa'*-dicyano-α-ethyl*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1802.

N-Methyl-ω-imide of *aa'*-dicyano-α-methyl*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1801.

$C_{14}H_{17}O_3N_3$ Ethyl 1-methyl-2-hydrindone-1-carboxylate semicarbazone (Perkin and Titley), 1570.

$C_{14}H_{17}O_6N$ Indican, constitution of (Macbeth and Pryde), 1660.

2-Salicylidene-1-methyl glucosamine (Irvine and Earl), 2379.

$C_{14}H_{18}O_3N_2$ Indole-2-carboxydimethylacetalylmethylamide (Kermack, Perkin, and Robinson), 1886.

3-Keto-4-methyl-3:4-dihydro-4-carboline (Kermack, Perkin, and Robinson), 1887.

$C_{14}H_{20}O_4N_2$ Ethyl βγ-dicyano-γ-methylpentane-ββ-dicarboxylate (Hope and Sheldon), 2234.

$C_{14}H_{20}O_5N_2$ αβ-Dicyano-γ-hydroxy-γ-methylnonane-αβ-dicarboxylic acid (Birch and Thorpe), 1830.

Substance, from α-keto-ββγ-trimethylsuccinic acid and *p*-phenylenediamine (Kon, Stevenson, and Thorpe), 664.

$C_{14}H_{21}O_4N_3$ ω-Imide of *aa'*-dicarbamyl-*aa'*-dimethyl*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1803.

$C_{14}H_{22}O_4Se$ Selenium bis-*C*-ethylacetylacetone (Morgan, Drew, and Barker), 2461.

$C_{14}H_{22}O_4Se_2$ Diselenium bis-*C*-ethylacetylacetone (Morgan, Drew, and Barker), 2464.

$C_{14}H_{22}O_7N_2$ Semicarbazone of the oxalyl derivative of ethyl glutarate (Dickens, Kon, and Thorpe), 1501.

$C_{14}H_{30}OS_{12}$ Substance, from potassium dithioethylene glycol and chloropicrin (RÂY and DAS), 326.

14 IV

$C_{14}H_8O_5N_2Cl$ Substance, from α-2:4-dinitrobenziloxime and phosphorus pentachloride (BISHOP and BRADY), 2369.

$C_{14}H_{10}O_2N_2Cl$ Nitrophenylhydrazones of chlorocoumaran-2-ones (MINTON and STEPHEN), 1602.

$C_{14}H_{10}O_4N_2Cl_2$ 2:2′-Dichloro-6:6′-dinitro-4:4′-ditolyl (BURTON and KENNER), 495.

$C_{14}H_{12}ON_2Cl$ *p*-Chloroacetylaminoazobenzene (BARNETT and COOK), 795.

$C_{14}H_{12}O_2NCl$ Chlorophenoxyacetanilides (MINTON and STEPHEN), 1601.

$C_{14}H_{12}O_2N_2S$ 9-Dimethylamino-2-thiol-3-phenoxazone (WATSON and DUTT), 1942.

$C_{14}H_{12}O_4NCl$ *o*-Acetoxybenzoic acid ω-pyridinium chloride (BARNETT and COOK), 797.

$C_{14}H_{12}O_7N_2Pb$ Lead nitrotolyloxides (GODDARD and WARD), 265.

$C_{14}H_{12}O_{11}N_4Pb_3$ Lead *di*nitro-*o*-tolyloxide (GODDARD and WARD), 265.

$C_{14}H_{15}O_3N_3S$ Methyl-orange, use of, as an indicator (HICKMAN and LINSTEAD), 2502.

$C_{14}H_{18}ONI$ Ethoxyquinaldine ethiodides (BRAUNHOLTZ), 170.

$C_{14}H_{19}N_4ClS$ Phenylhydrazinoethanesulphonylphenylhydrazide hydrochloride (CLUTTERBUCK and COHEN), 127.

C_{15} Group.

$C_{15}H_{11}N$ 2:3-Indeno(2:1)-indole (ARMIT and ROBINSON), 838.

$C_{15}H_{12}O_3$ 2-Hydroxystyryl furfurylidenemethyl ketone (BUCK and HEILBRON), 1100.

$C_{15}H_{14}O_5$ Acetyl derivative of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic lactone (KON, STEVENSON, and THORPE), 661.

$C_{15}H_{14}O_6$ Catechin, constitution of (NIERENSTEIN), 604.

$C_{15}H_{16}N_2$ Quinoxaline derivative of *cyclo*pentane*spirocyclo*pentane-3:4-dione (KON), 526.

$C_{15}H_{22}O_3$ Castelin (+ $3H_2O$) (BOSMAN), 970.

Ethyl hydrogen Δ$^{\alpha}$-butene-αδ-dicarboxylate-β-malonate (FARMER), 2018.

$C_{15}H_{24}O_4$ Menthyl acetylpyruvate (SHIMOMURA and COHEN), 2053.

15 III

$C_{15}H_9O_2Cl$ Chloro-1-benzylidenecoumaran-2-ones (MINTON and STEPHEN), 1602.

$C_{15}H_9O_3Cl$ Chloroflavonols (MINTON and STEPHEN), 1602.

$C_{15}H_{10}O_3N_2$ Phthalylphenylcarbamide (ELLIOTT), 206.

$C_{15}H_{10}N_2S_2$ Dibenzothiazolylmethane (MILLS), 464.

$C_{15}H_{11}O_3N$ Benzoylmandelonitrile, action of alcoholic sodium ethoxide on (GREENE and ROBINSON), 2182.

$C_{15}H_{11}O_2Cl$ Chlorodibenzoylmethane (MORGAN, DREW, and BARKER), 2463.

$C_{15}H_{11}O_5N_3$ Cinnam*anti*aldoxime-2:4-dinitrophenyl ether (BRADY and THOMAS), 2106.

$C_{15}H_{11}O_6N_5$ 2:4-Dinitrobenzilmonosemicarbazone (BISHOP and BRADY), 2370.

$C_{15}H_{13}O_5N_3$ Nitrophenylhydrazone of methyl aldehydosalicylate (WAYNE and COHEN), 1027.

$C_{15}H_{14}O_3N_2$ Phenylhydrazone of methyl 5-aldehydosalicylate (WAYNE and COHEN), 1026.

$C_{15}H_{14}O_4N_2$ Nitrotolyloxyacetanilides (MINTON and STEPHEN), 1505.

$C_{15}H_{16}O_5N_2$ $\alpha\beta$-Dicyano-γ-hydroxy-γ-benzylbutane-$\alpha\beta$-dicarboxylic acid (BIRCH and THORPE), 1833.

$C_{15}H_{14}O_5N_4$ Dinitrobenzaldoxime-*N*-*p*-dimethylaminophenyl ethers (BARROW, GRIFFITHS, and BLOOM), 1715.

2:4-Dinitrobenzaldoxime-*N*-*p*-ethylaminophenyl ether (BARROW, GRIFFITHS, and BLOOM), 1716.

$C_{15}H_{15}ON_3$ Benzylidene derivative of δ-benzylsemicarbazide (WILSON, HOPPER, and CRAWFORD), 868.

$C_{15}H_{15}O_2N_3$ Aminomalonanilide (RENDALL and WHITELEY), 2119.

$C_{15}H_{15}O_5N$ Carbethoxyaminomethoxynaphthoic acids (FROELICHER and COHEN), 1658.

$C_{15}H_{15}N_3S$ Benzaldehyde-*S*-benzylthiosemicarbazone (WILSON and BURNS), 874.

$C_{15}H_{16}ON$ *r*- and *l*-Phenyl-*p*-tolylacetamides (MCKENZIE and SMITH), 1357.

$C_{15}H_{16}N_2Cl_2$ Dibenzylcyanamide dihydrochloride (SHORT and SMITH), 1806.

$C_{15}H_{17}O_2N$ Anil of *cis*-3:3-diethyl*cyclo*propane-1:2-dicarboxylic acid (DESHAPANDE and THORPE), 1438.

$C_{15}H_{17}O_4N$ Ethyl α-cyano-*o*-carbethoxy-β-phenylpropionate (DAVIES and PERKIN), 2210.

$C_{15}H_{19}O_2N_3$ *cyclo*Hexane*spirocyclo*butan-3-one *p*-nitrophenylhydrazone (KON), 521.

$C_{15}H_{19}O_2N$ Anilic acid from *cis*-3:3-diethyl*cyclo*propane-1:2-dicarboxylic acid (DESHAPANDE and THORPE), 1438.

$C_{15}H_{19}O_4N_3$ Phenylhydrazone of ethyl 3-methyl*cyclo*butan-1-one-3-acetate (INGOLD), 1152.

$C_{15}H_{19}O_5N$ Ethyl *o*-carbethoxybenzylmalonamate (DAVIES and PERKIN), 2210.

$C_{15}H_{20}ON_2$ Substance, from *cyclo*hexanone and ethyl α-cyanopropionate (KON and THORPE), 1802.

$C_{15}H_{20}O_4N_2$ 6-Methoxyindole-2-carboxydimethylacetalylmethylamide (KERMACK, PERKIN, and ROBINSON), 1889.

$C_{15}H_{20}N_4S_2$ $\alpha\gamma$-Propanedisulphonyldiphenylhydrazide (CLUTTERBUCK and COHEN), 127.

$C_{15}H_{21}O_3N$ Semianilide of α-ethyl-$\beta\beta$-dimethylglutaric acid (KON and THORPE), 1800.

$C_{15}H_{21}O_6N$ Ethyl Δ^{α}-butene-$\alpha\beta$-dicarboxylate-β-cyanoacetate (FARMER), 2017.

$C_{15}H_{20}O_2N_2$ 3-Methylindole-2-carboxydimethylacetalylmethylamide (KERMACK, PERKIN, and ROBINSON), 1888.

$C_{15}O_{16}NFe_4$ Iron nitrosocarbonyl (MOND and WALLIS), 35.

15 IV

$C_{15}H_9O_2ClBr_2$ Chloro-1-benzylidenecoumaran-2-one dibromides (MINTON and STEPHEN), 1602.

$C_{15}H_{11}O_2Cl_3Te$ Tellurium dibenzoylmethane trichloride (MORGAN and DREW), 939.

$C_{15}H_{12}O_3N_2Br$ Phenylhydrazone of methyl 5-bromoaldehydosalicylate (WAYNE and COHEN), 1024.

$C_{15}H_{14}O_2SSe$ α-Naphthylthioselenium acetylacetone (MORGAN, DREW, and BARKER), 2453.

$C_{15}H_{16}O_4N_2S$ Dimethylharminesulphonic acid ($1{\cdot}5H_2O$) (KERMACK, PERKIN, and ROBINSON), 1896.

$C_{15}H_{16}O_7N_2S_2$ *o*-Di-*p*-tolylcarbamide-2:2′-disulphonic acid, potassium salt (SCOTT and COHEN), 2041.

$C_{18}H_{17}O_4NS$ *N*-Phenyl-*N*-benzyl-β-aminoethyl sulphate, sodium salt (SAUNDERS), 2674.

$C_{18}H_{28}ONI$ β-Benzyloxytetraethylammonium iodide (CLEMO and PERKIN), 649.

15 V

$C_{18}H_{10}O_2N_2ClBr_3$ Chlorobromomalon-*p*-bromoanilide (WEST), 2201.

$C_{18}H_{10}O_2N_2Cl_2Br_2$ Dichloromalon-*p*-bromoanilide (WEST), 2201.

$C_{18}H_{11}O_2N_2ClBr_2$ Chloromalon-*p*-bromoanilide (WEST), 2201.

$C_{18}H_{13}O_6N_2BrS$ Benzoyl-*p*-bromophenylbiuret-*o*-sulphonic acid, potassium salt ($+2\frac{1}{2}H_2O$) (SCOTT and COHEN), 2047.

$C_{15}H_{28}O_2N_2ClS_2$ Substance, from pinacolylthiocarbamide and chloropicrin (RÂY and DAS), 326.

C_{16} Group.

$C_{16}H_{10}O_5$ *iso*Hæmatin (CRABTREE and ROBINSON), 1040.

2-Methoxyanthraquinone-1-carboxylic acid (BRADSHAW and PERKIN), 917.

$C_{16}H_{12}O_5$ *iso*Brazilein, synthesis of (CRABTREE and ROBINSON), 1033.

Benzoyl derivative of methyl-5-aldehydosalicylate (WAYNE and COHEN), 1023.

$C_{16}H_{13}N$ 1-Methyl-2:3-indenoindoles (ARMIT and ROBINSON), 838.

$C_{16}H_{14}O_2$ Benzoylbenzoin, mechanism of the formation of (GREENE and ROBINSON), 2182.

$C_{16}H_{14}O_4$ *s*-Diphenylsuccinic acid, preparation of (LAPWORTH and MCRAE), 1709.

$C_{16}H_{14}O_5$ β-Gambier-catechincarboxylic acids, and their salts (NIERENSTEIN), 26.

$C_{16}H_{14}S$ Distyryl sulphide (POPE and SMITH), 1168.

$C_{16}H_{16}O$ Phenyl-*p*-methoxyphenyl-Δ^2-propenes (INGOLD and PIGGOTT), 2386.

$C_{16}H_{18}N_2$ Quinoxaline derivative of *cyclo*hexane*spirocyclo*pentane-3:4-dione (KON), 523.

$C_{16}H_{22}N_2$ *d*-Carvotanacetonephenylhydrazone (SIMONSEN and RAU), 880.

$C_{16}H_{24}O_8$ Ethyl*iso*butylene-αγγγ′-tetracarboxylate (INGOLD and NICKOLLS), 1643.

$C_{16}H_{28}O_3$ Substance, from hydrolysis of capsularin (SAHA and CHOUDHURY), 1045.

$C_{16}H_{30}O_4$ Thapsic acid, electro-synthesis of (CARMICHAEL), 2545.

$C_{16}H_{32}O_2$ Palmitic acid, sodium salt, hydrolysis of solutions of (MCBAIN, TAYLOR, and LAING), 621.

16 III

$C_{16}H_8O_{10}N_2$ 6:6′-Dinitropiperil (GREENE and ROBINSON), 2193.

$C_{16}H_{10}O_5N_4$ *p*-Nitrobenzeneazo-4-nitro-α-naphthol (MUKERJI), 2880.

$C_{16}H_{10}O_{10}N_2$ 6:6′-Dinitropiperoin (GREENE and ROBINSON), 2192.

$C_{16}H_{11}O_8N$ 6′-Nitropiperoin (GREENE and ROBINSON), 2191.

$C_{16}H_{12}O_5N_4$ *p*-Nitrobenzenehydrazo-4-nitro-α-naphthol (MUKERJI), 2881.

$C_{16}H_{12}N_2S_2$ 2-Methylbenzothiazolenylbenzothiazolylmethane (MILLS), 465.

$C_{16}H_{12}O_2N$ *s*-Diphenylsuccinimide (LAPWORTH and MCRAE), 1712.

$C_{16}H_{12}O_4N_2$ Carbanilinonitrocinnam*anti*aldoximes (BRADY and THOMAS), 2108.

$C_{16}H_{12}N_2Cl$ Quindoline methochloride (ARMIT and ROBINSON), 837.

$C_{16}H_{14}O_2N_2$ Carbanilinocinnamaldoximes (BRADY and THOMAS), 2104.

$C_{16}H_{14}O_7N_2$ Acetyl-2:4-dinitrohydrobenzoin (BISHOP and BRADY), 2367.

$C_{16}H_{15}ON$ Cinnam*anti*aldoxime benzyl ethers (Brady and Thomas), 2106.
$C_{16}H_{19}O_3N_3$ *iso*Nitrosomalonanilide methyl ethers (Rendall and Whiteley), 2115, 2118.
$C_{16}H_{16}OBr_2$ $\beta\gamma$-Dibromophenyl-*p*-methoxyphenylpropanes (Ingold and Piggott), 2386.
$C_{16}H_{16}Cl_2S$ $\beta\beta'$-Dichloro-$\beta\beta'$-diphenyldiethyl sulphide (Pope and Smith), 1168.
$C_{16}H_{17}ON$ Acetyl derivative of dibenzylamine (Short and Smith), 1806.
$C_{16}H_{17}O_4N$ Ethyl α-cyano-γ-phenylglutaconate (Ingold, Perren, and Thorpe), 1782.
$C_{16}H_{15}O_3N_3$ *p*-Nitroso-β-phenoxy diethylaniline (Clemo and Perkin), 645.
$C_{16}H_{18}O_2S_2$ 4:4′-Dimethoxydi-*m*-tolyl disulphide (Stewart), 2558.
$C_{16}H_{19}ON$ Anil of *cyclo*hexane*spirocyclo*pentane-3:4-dione (Kon), 523.
$C_{16}H_{19}N_2I$ 2-*p*-Dimethylaminostyrylpyridine methiodide (Mills and Pope), 946.
$C_{16}H_{21}O_2N_3$ *N*-Ethyl-ω-imide of $\alpha\alpha'$-dicyano-α-ethyl*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1802.
$C_{16}H_{22}ON_2$ Substance, from methylation of the ω-imide of $\alpha\alpha'$-dicyano*cyclo*hexane-1:1-diacetic acid (Kon and Thorpe), 1801.
$C_{16}H_{34}O_3S$ Hexadecanesulphonic acid, preparation and properties of (Norris), 2162.

16 IV

$C_{16}H_{10}O_3NCl$ 2-Chloroacetylaminoanthraquinone (Barnett and Cook), 796.
$C_{16}H_{11}O_2NSe$ Cyanoselenium dibenzoylmethane (Morgan, Drew, and Barker), 2468.
$C_{16}H_{13}N_3IS_2$ Dibenzothiazolylmethane methiodide (Mills), 465.
$C_{16}H_{16}O_3N_2S$ Substance, from thioethylene glycol and phenylcarbimide (Bennett), 2146.
$C_{16}H_{14}Cl_6As_2Pt$ Platinum bis-β-chlorovinylbis-$\beta\beta'\beta''$-trichlorotrivinylarsine (Mann and Pope), 1758.
$C_{16}H_{26}O_4Cl_2Te$ Tellurium bispivalylacetone dichloride (Morgan and Drew), 938.

16 V

$C_{16}H_{18}O_3Cl_{12}As_4Pt$ Bis-$\beta\beta'$-dichlorodivinylchloroarsinebis-$\beta\beta'$-dichlorodivinylhydroxyarsine platinichloride (Mann and Pope), 1759.

C_{17} Group.

$C_{17}H_{10}O_3$ 2-Hydroxybenzanthrone (Perkin and Spencer), 477.
$C_{17}H_{13}N$ 1-Styryl*iso*quinoline (Mills and Smith), 2732.
$C_{17}H_{14}O_3$ 3′:2-Dihydroxydistyryl ketone (+ H_2O) (Buck and Heilbron), 1097.
$C_{17}H_{16}O_3$ 3-Ethoxy-2-phenylbenzopyrylium hydroxide, salts of (Pratt and Robinson), 1580.
p-Methoxybenzylcinnamic acids (Ingold and Piggott), 2386.
Phenyl 2-hydroxy-β-ethoxystyryl ketone (Pratt and Robinson), 1580.
$C_{17}H_{16}O_4$ 7-Hydroxy-3-ethoxy-2-phenylbenzopyrylium hydroxide, salts of (Pratt and Robinson), 1583.
$C_{17}H_{18}O_3$ Benzoyl derivative of *cyclo*hexane*spirocyclo*pentane-3:4-dione (Kon), 523.
$C_{17}H_{19}N_3$ 2:8-Tetramethyldiaminoacridine (Moudgill), 1508.
$C_{17}H_{20}O$ Benzylidene-*dl*-piperitone (Read and Smith), 574.
$C_{17}H_{24}O$ Benzyl-*p*-menthenol (Read and Smith), 581.

17 III

$C_{17}H_7O_4N$ 1:2-Dioxyanthraquinonequinolines, amminocobaltic salts (MORGAN and SMITH), 168.

$C_{17}H_9O_3N$ 6:7-Methylenedioxy-2:3(3-ketoindeno)(1:2)-quinoline (ARMIT and ROBINSON), 835.

$C_{17}H_{11}ON$ 2-Aminobenzanthrone (PERKIN and SPENCER), 480.

$C_{17}H_{11}O_2N$ 6:7-Methylenedioxy-2:3-indenoquinolines, and their salts (ARMIT and ROBINSON), 832.

$C_{17}H_{11}O_5N$ 2:5-Dipiperonyloxazole (GREENE and ROBINSON), 2188.

6′-Nitro-3′:4′-methylenedioxy-2-benzylidene-1-hydrindone (ARMIT and ROBINSON), 830.

Substance, from benzoylmethylenedioxymandelonitrile and sodium ethoxide (GREENE and ROBINSON), 2187.

$C_{17}H_{11}O_5N_3$ *m*-Nitrobenzene-1-azo-2-oxy-3-naphthoic acid, and its cobaltammine salt (MORGAN and SMITH), 2873.

$C_{17}H_{12}O_3N_2$ Hydroxy-α-naphthylidenenitroanilines (MORGAN and REEVES), 4.

$C_{17}H_{13}O_2Cl$ Hydroxy-2-styrylbenzopyrylium chlorides, and their salts (BUCK and HEILBRON), 1204.

$C_{17}H_{13}O_3N$ 6′-Amino-3′:4′-methylenedioxy-2-benzylidene-1-hydrindone (ARMIT and ROBINSON), 831.

$C_{17}H_{13}O_3Cl$ Dihydroxy-2-styrylbenzopyrylium chlorides (BUCK and HEILBRON), 1207.

$C_{17}H_{13}O_4Cl$ 2′:4′:7-Trihydroxy-2-styrylbenzopyrylium chloride (BUCK and HEILBRON), 1208.

$C_{17}H_{13}NS$ 4-Phenyl-2-styrylthiazole (MILLS and SMITH), 2734.

$C_{17}H_{14}N_2S_2$ 2-Ethylbenzothiazolenylbenzothiazolylmethane (MILLS), 464.

$C_{17}H_{16}O_2N_2$ Acetonaphthalide-ω-pyridinium hydroxides, salts of (BARNETT and COOK), 795.

$C_{17}H_{17}O_3N_3$ *iso*Nitrosomalonanilide (RENDALL and WHITELEY), 2115.

$C_{17}H_{18}O_5N_4$ 2:4-Dinitrobenzaldoxime-*N*-*p*-diethylaminophenyl ether (BARROW, GRIFFITHS, and BLOOM), 1715.

$C_{17}H_{19}O_6N$ Ethyl 2-carboxyindole-1:3-diacetate (KERMACK, PERKIN, and ROBINSON), 1893.

$C_{17}H_{20}O_4N_2$ Nitrobenzoyl-*dl*-piperitone-α-oximes (READ, SMITH, and BENTIVOGLIO), 591.

$C_{17}H_{20}O_4N_4$ 3:3′-Dinitro-4:4′-tetramethyldiaminodiphenylmethane (MOUDGILL), 1507.

17 IV

$C_{17}H_{12}ON_2Cl_2$ 2:6-Dichlorotoluene-4-azo-β-naphthol (DAVIES), 813.

$C_{17}H_{12}O_2NCl$ β-Naphthyl acetate ω-pyridinium chloride ($+H_2O$) (BARNETT and COOK), 797.

$C_{17}H_{16}O_2N_2Br_2$ Bromomalonmethylbromoanilide (WEST), 2199.

$C_{17}H_{15}N_2IS_2$ Dibenzothiazolylmethane ethiodide (MILLS), 464.

2:2′-Dimethylthiocyanine iodide (MILLS), 465.

$C_{17}H_{16}O_4N_2S$ Quindoline methosulphate (ARMIT and ROBINSON), 836.

$C_{17}H_{17}O_2N_2Cl$ Chloromalonmethylanilide (WEST), 2199.

$C_{17}H_{17}O_2N_2Br$ Bromomalonmethylanilide (WEST), 2199.

$C_{17}H_{21}ON_2Cl$ *Py*-*N*-Methyl-*Ind*-*N*-propylharmine chloride (KERMACK, PERKIN, and ROBINSON), 1894.

Py-*N*-Propyl-*Ind*-*N*-methylharmine chloride (KERMACK, PERKIN, and ROBINSON), 1894.

C_{18} Group.

$C_{18}H_8O_3$ Lactone of hydroxybenzanthronecarboxylic acid (BRADSHAW and PERKIN), 913.

$C_{18}H_{10}O_4$ Hydroxybenzanthronecarboxylic acid, and its salts (BRADSHAW and PERKIN), 913.

$C_{18}H_{16}O_4$ 3′:4′-Methylenedioxy-2-hydroxydistyryl ketone (BUCK and HEILBRON), 1099.

$C_{18}H_{14}O_6$ Methyl 2-methoxyanthraquinone-1-glyoxylate (BRADSHAW and PERKIN), 917.

$C_{18}H_{16}O_3$ Methoxy-2-hydroxydistyryl ketones (BUCK and HEILBRON), 1098.

$C_{18}H_{34}O_2$ Oleic acid, sodium salt, ultra-filtration of solutions of (McBAIN and JENKINS), 2325.

18 III

$C_{18}H_{12}O_2N_2$ αα′-Dicyanodibenzyl diketone, colouring matters from (DUTT and SEN), 2663.

$C_{18}H_{12}Cl_3Bi$ Tri-*p*-chlorophenylbismuthine (CHALLENGER and RIDGWAY), 108.

$C_{18}H_{12}Cl_5Bi$ Tri-*p*-chlorophenylbismuthine dichloride (CHALLENGER and RIDGWAY), 109.

$C_{18}H_{12}Br_3Bi$ Tri-*p*-bromophenylbismuthine (CHALLENGER and RIDGWAY), 111.

$C_{18}H_{12}Br_5Bi$ Tri-*p*-bromophenylbismuthine dibromide (CHALLENGER and RIDGWAY), 111.

$C_{18}H_{13}O_2N$ Anhydro-6:7-methylenedioxy-2:3-indeno(2:1)-quinoline methohydroxide (ARMIT and ROBINSON), 834.

$C_{18}H_{13}O_2N_3$ Carbazole-3-azoresorcinol (MORGAN and READ), 2713.

$C_{18}H_{13}O_3N_3$ Nitrophenylaminohydroxy-α-naphthylacetonitriles (MORGAN and REEVES), 4.

$C_{18}H_{13}O_3Cl$ 3′:4′-Methylenedioxy-2-styrylbenzopyrylium chloride (BUCK and HEILBRON), 1209.

$C_{18}H_{14}ON_2$ Phenylaminohydroxy-α-naphthylacetonitriles (MORGAN and REEVES), 4.

$C_{18}H_{14}O_{12}N_4$ Ethyl 4:6:4′:6′-tetranitrodiphenate (CHRISTIE and KENNER), 619.

$C_{18}H_{15}O_2N$ Ethyl 2:3-indeno(2:1)-indolecarboxylate (PERKIN and TITLEY), 1568.

$C_{18}H_{15}O_2Cl$ Methoxy-2-styrylbenzopyrylium chlorides, and their salts (BUCK and HEILBRON), 1206.

$C_{18}H_{15}O_3Cl$ 3′-Methoxy-4′-hydroxy-2-styrylbenzopyrylium chloride (BUCK and WILLIAMS), 1208.

$C_{18}H_{18}O_6N_2$ Hydrazone of methyl 5-aldehydosalicylate (WAYNE and COHEN), 1026.

$C_{18}H_{17}O_3N_3$ Ethyl carbazole-3-azoacetoacetate (MORGAN and READ), 2715.

$C_{18}H_{17}O_4N_3$ Ethyl 2-hydrindone-1-carboxylate *p*-nitrophenylhydrazone (PERKIN and TITLEY), 1569.

$C_{18}H_{19}O_2N_3$ Ethyl 2-hydrindone-1-carboxylate phenylhydrazone (PERKIN and TITLEY), 1568.

$C_{18}H_{19}O_3N_3$ *iso*Nitrosomalonanilide *n*- and *iso*-propyl ethers (RENDALL and WHITELEY), 2116.

*iso*Nitrosomalondibenzylamide methyl ether (RENDALL and WHITELEY), 2118.

$C_{18}H_{23}ON_3$ Base, and its salts, from aniline and acraldehyde (MANN), 2179.

$C_{18}H_{34}O_3N$ Anilic acid from *cis*-1-methyl-1-*n*-hexyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1829.

$C_{18}H_{17}O_6N$ Ethyl ω-cyanomethanetetra-aceta e (INGOLD and NICKOLLS) 1645.

Ethyl β-cyano*iso*pentane-αβδδ′-tetracarboxylate (INGOLD and NICKOLLS), 1647.

18 IV

$C_{18}H_{11}O_2NS$ 4-Phenyl-2-thiazolylphthalonylmethane (MILLS and SMITH), 2734.

$C_{18}H_{12}Cl_2Br_2Bi$ Tri-*p*-bromophenylbismuthine dichloride (CHALLENGER and RIDGWAY), 111.

$C_{18}H_{12}Cl_2Br_2Bi$ Tri-*p*-chlorophenylbismuthine dibromide (CHALLENGER and RIDGWAY), 109.

$C_{18}H_{13}ON_4Cl_3$ 4′:4″-Dichloro-2:4-bisbenzeneazophenol (CHATTAWAY and HILL), 2758.

$C_{18}H_{12}ON_4Br_2$ 4′:4″-Dibromo-2:4-bisbenzeneazophenol (CHATTAWAY and HILL), 2759.

$C_{18}H_{12}ON_4I_2$ 4′:4″-Di-iodo-2:4-bisbenzeneazophenol (CHATTAWAY and HILL), 2759.

$C_{18}H_{13}ON_4Cl$ Chlorobenzeneazobenzeneazophenols (CHATTAWAY and HILL), 2759.

$C_{18}H_{13}ON_4Br$ Bromobenzeneazobenzeneazophenols (CHATTAWAY and HILL), 2759.

$C_{18}H_{13}ON_4I$ Iodobenzeneazobenzeneazophenols (CHATTAWAY and HILL), 2760.

$C_{18}H_{13}O_{13}N_3Pb_4$ Lead *m*-nitrophenoxide (GODDARD and WARD), 264.

$C_{18}H_{14}ON_3Cl$ 4-Chloroacetylaminonaphthalene-1-azobenzene (BARNETT and COOK), 795.

$C_{18}H_{15}ON_3S$ 2-Amino-8-thiol-10-phenylphenazonium hydroxide (WATSON and DUTT), 1941.

$C_{18}H_{15}OFBi$ Triphenylbismuthine difluoride (CHALLENGER and WILKINSON), 96.

$C_{18}H_{22}O_4N_2S_4$ Diethylsulphine-(bis)-*p*-toluenesulphonylimine (MANN and POPE), 1054.

C_{19} Group.

$C_{19}H_{14}O_3$ Ethoxybenzanthrone, and its salts (PERKIN and SPENCER), 477.

$C_{19}H_{18}O_6$ 3′:4′-Dimethoxy-2-hydroxydistyryl ketone (BUCK and HEILBRON), 1099.

$C_{19}H_{20}O_6$ Trimethoxy-β-gambier-catechincarboxylic acid (NIERENSTEIN), 28.

$C_{19}H_{22}O_5$ 4:6:3′:4′-Tetramethoxy-3-phenylchroman (NIERENSTEIN), 612.

$C_{19}H_{22}O_6$ 2-Hydroxy-3:4-dimethoxyphenyl β-veratrylethyl ketone (CRABTREE and ROBINSON), 1038.

$C_{19}H_{44}O_5$ Menthyl phenoxymalonate (SHIMOMURA and COHEN), 2054.

19 III

$C_{19}H_{10}O_6N_2$ Alizarin pyridiniumnitrolbetaines (BARNETT and COOK), 1388.

$C_{19}H_{13}O_2N$ 2-Acetylaminobenzanthrone (PERKIN and SPENCER), 480.

$C_{19}H_{14}O_3N_2$ 9-Nitroanthranyl-10-pyridinium hydroxide, salts of (BARNETT, COOK, and GRAINGER), 2064.

$C_{19}H_{15}O_2N$ Anhydro-6:7-methylenedioxy-2:3(3-methylindeno)(2:1)-quinoline methohydroxide (ARMIT and ROBINSON), 834.

9-Hydroxyanthranyl-10-pyridinium hydroxide, salts of (BARNETT, COOK, and GRAINGER), 2065.

N-Phenylbenzimino-*m*-hydroxyphenyl ether, and its hydrochloride (CHAPMAN), 1676.

$C_{19}H_{16}OS_3$ *pp'p''*-Trithioltriphenylcarbinol (WATSON and DUTT), 1940.

$C_{19}H_{16}O_3N_2$ Quinoxaline derivative of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic lactone (KON, STEVENSON, and THORPE), 661.

Xanthorocellin (FORSTER and SAVILLE), 821.

$C_{19}H_{16}O_4N_2$ α-Benzoylamino-β-[6-methoxyindolyl(3)]-acrylic acid (KERMACK, PERKIN, and ROBINSON), 1883.

$C_{19}H_{17}O_3Cl$ 3':4'-Dimethoxy-2-styrylbenzopyrylium chloride (BUCK and HEILBRON), 1210.

$C_{19}H_{17}O_4N_3$ Ethyl 1-methyl-2-hydrindone-1-carboxylate *p*-nitrophenylhydrazone (PERKIN and TITLEY), 1569.

$C_{19}H_{17}O_5N_3$ *p*-Nitrophenylhydrazone of *ac*-1-keto-2-hydroxy-3-methyltetrahydronaphthalene-3-acetic lactone (KON, STEVENSON, and THORPE), 662.

$C_{19}H_{18}O_2N_2$ Acetyldiphenylamine-ω-pyridinium hydroxide, salts of (BARNETT and COOK), 796.

$C_{19}H_{18}N_3Cl$ Substance, from thiocarbanilide and chloropicrin (RÂY and DAS), 327.

$C_{19}H_{19}ON$ β-Naphthoxyethylmethylaniline (CLEMO and PERKIN), 649.

$C_{19}H_{19}O_3N$ Anilic acid from *cis*-1-benzyl-1-methyl*cyclo*propane-2:3-dicarboxylic acid (BIRCH and THORPE), 1833.

$C_{19}H_{20}O_4N_2$ Quinoxaline derivative of methyl*cyclo*pentane*spirocyclo*pentane-3:4-dione-2:5-dicarboxylate (DICKENS, KON, and THORPE), 1502.

$C_{19}H_{21}O_3N_3$ *iso*Nitrosomalonanilide *n*-butyl ether (RENDALL and WHITELEY), 2116.

*iso*Nitrosomalondibenzylamide ethyl ether (RENDALL and WHITELEY), 2118.

$C_{19}H_{21}O_5Cl$ 2-Chloro-4:6:3':4'-tetramethoxy-3-phenylchroman (NIERENSTEIN), 611.

$C_{19}H_{21}O_5Br$ 3-Bromo-4:6:3':4'-tetramethoxy-3-phenylchroman (NIERENSTEIN), 612.

$C_{19}H_{21}O_6Br$ 3-Bromo-2-hydroxy-4:6:3':4'-tetramethoxy-3-phenylchroman (NIERENSTEIN), 609.

$C_{19}H_{22}ON_2$ Cinchonidine, salt of tropic acid with (KING and PALMER), 2585.

Cinchotoxine, salt of tropic acid with (KING and PALMER), 2584.

$C_{19}H_{24}ON_2$ Hydrocinchonidine, salts of tropic acid with (KING and PALMER), 2585.

Hydrocinchonine, salts of tropic acid with (KING and PALMER), 2585.

19 IV

$C_{19}H_{16}O_4NBr$ Phenobetaine of bromoalizarinpyridinium bromide (BARNETT and COOK), 1385.

$C_{19}H_{11}O_4NBr_2$ Bromoalizarinpyridinium bromide ($+1\frac{1}{2}H_2O$) (BARNETT and COOK), 1385.

$C_{19}H_{13}O_5NS$ Catecholsulphamphthalein (DUTT), 2392.

Resorcinolsulphamphthalein (DUTT), 2391.

$C_{19}H_{13}O_7NS$ Hydroxyquinolsulphamphthalein (DUTT), 2392.

Phloroglucinolsulphamphthalein (DUTT), 2391.

$C_{19}H_{13}O_9NS$ 1:2:4:5-Tetrahydroxybenzenesulphamphthalein (DUTT), 2392.

$C_{19}H_{14}O_4N_2S$ 2:2'-Iminophenolsulphamphthalein (DUTT), 2393.

$C_{19}H_{15}ON_4Br$ Bromobenzeneazo-*p*-tolueneazophenols (CHATTAWAY and HILL), 2760.

$C_{19}H_{15}O_2N_2S_2$ Diphenylbisazo-2-hydroxy-7-naphthyl xanthate (WATSON and DUTT), 2417.

$C_{19}H_{15}O_4NS$ Phenolsulphamphthalein, and its sodium salt (DUTT), 2390.

$C_{19}H_{16}ON_2S_2$ Ethyl 4-benzeneazo-1-naphthylxanthate (Watson and Dutt), 1940.

$C_{19}H_{16}O_2N_4S$ 4:4′-Diamino-2:2′-iminophenylsulphamphthalein (Dutt), 2392.

$C_{19}H_{17}ON_4Cl$ *p*-Chloroacetylaminoazobenzene pyridinium chloride (Barnett and Cook), 795.

$C_{19}H_{19}N_2IS_2$ 2:2′-Diethylthiocyanine iodide (Mills), 461.

$C_{19}H_{20}N_3IS$ 4-Phenylthiazole-2-aldehyde *p*-dimethylaminoanil methiodide (Mills and Smith), 2735.

$C_{19}H_{23}O_8NBr$ 1-Bromo-2-salicylidene-3:5:6-triacetyl glucosamine (Irvine and Earl), 2375.

C_{20} Group.

$C_{20}H_{14}O_4$ Hydroxybenzanthronecarboxylic acid dimethyl ether (Bradshaw and Perkin), 914.

$C_{20}H_{16}N_4$ $\alpha\alpha'$-Dicyano-2:3-dibenzyl-5:6-dihydropyrazine (Dutt and Sen), 2664.

$C_{20}H_{20}O_{13}$ Acertannin (Perkin and Uyeda), 68.

$C_{20}H_{24}O_6$ 3:4:6:3′:4′-Pentamethoxy-3-phenylchroman (Nierenstein), 613.

$C_{20}H_{24}O_7$ 2-Hydroxy-3:4:6:3′:4′-pentamethoxy-3-phenylchroman (Nierenstein), 610.

$C_{20}H_{38}O_4$ Ethyl thapsate (Carmichael), 2548.

20 III

$C_{20}H_{11}O_5S_2$ Dithiolfluorescein (Watson and Dutt), 1942.

$C_{20}H_{12}O_5N_4$ 4-Nitronaphthaleneazo-4-nitro-α-naphthol (Mukerji), 2881.

$C_{20}H_{14}O_2N_4$ Diamide of $\alpha\alpha'$-dicyano-β-benzylglutaric acid (Stevenson and Thorpe), 1720.

$C_{20}H_{14}O_2S_2$ 1:1′-Dihydroxy-5:5′-dinaphthyl disulphide (Watson and Dutt), 2416.

$C_{20}H_{14}O_2S_3$ Di-α-naphthol trisulphide (Watson and Dutt), 2418.

$C_{20}H_{14}O_4S_2$ Benzenedi-*m*-thiobenzoic acid, and its sodium salt (Smiles and Graham), 2508.

$C_{20}H_{14}O_5N_4$ 2:4-Dinitrobenzilmonophenylhydrazone (Bishop and Brady), 2369.

$C_{20}H_{14}ClTl$ Thallium di-α-naphthyl chloride (D. and A. E. Goddard), 261.

$C_{20}H_{14}BrTl$ Thallium di-α-naphthyl bromide (D. and A. E. Goddard), 258.

$C_{20}H_{16}O_4Se_2$ Selenium benzoylacetone (Morgan, Drew, and Barker), 2455.

$C_{20}H_{16}O_4Se_3$ *cyclo*Triselenium bisbenzoylacetone (Morgan, Drew, and Barker), 2454.

$C_{20}H_{18}O_2N_2$ Methylxanthorocellin (Forster and Saville), 822.

$C_{20}H_{18}O_4Se$ Selenium bisbenzoylacetone (Morgan, Drew, and Barker), 2459.

$C_{20}H_{18}O_4Se_2$ Diselenium bisbenzoylacetone (Morgan, Drew, and Barker), 2457.

$C_{20}H_{20}O_3N_2$ Anhydropicrorocellin (Forster and Saville), 821.

$C_{20}H_{21}O_3N_3$ Ethyl *N*-ethylcarbazole-3-azoacetoacetate (Morgan and Read), 2716.

$C_{20}H_{21}N_2I$ 1-*p*-Dimethylaminostyryl-*iso*quinoline methiodide (Mills and Smith), 2733.

$C_{20}H_{22}O_4N_2$ Picrorocellin, constitution of (Forster and Saville), 816.

$C_{20}H_{22}O_7Cl$ 2-Chloro-3:4:6:3′:4′-pentamethoxy-3-phenylchroman (Nierenstein), 613.

$C_{20}H_{21}ON_3$ Base, from *p*-toluidine and acraldehyde (Mann), 2182.

$C_{20}H_{24}O_2N_2$ Quinotoxine, salts of tropic acid with (King and Palmer), 2584.

$C_{20}H_{24}O_3N_2$ Di-*p*-toluidide of α-hydroxy-β-methylglutaric acid (Ingold), 2689.

$C_{20}H_{24}O_4N_2$ Di-*p*-toluidides of αα′-dihydroxy-β-methylglutaric acids (Ingold), 2691.

$C_{20}H_{25}O_9N$ 2-Salicylidene-3:5:6-triacetyl-1-methyl glucoseamine (Irvine and Earl), 2379.

$C_{20}H_{26}O_2N_2$ Hydroquinidine, salt of tropic acid with (King and Palmer), 2582.

Hydroquinine, salts of, with tropic acid (King and Palmer), 2582.

$C_{20}H_{27}O_{11}N$ Amygdalin, biose from (Haworth and Leitch), 1921.

$C_{20}H_{29}O_{10}N$ Ethyl ω-cyano-ω′ω″-dicarboxymethanetriacetate (Ingold and Perren), 1418.

20 IV

$C_{20}H_{18}O_4Cl_2Te$ Tellurium bisbenzoylacetone dichloride (Morgan and Drew), 930.

$C_{20}H_{19}O_4FeCl_4$ 7:5′:6′-Trimethoxy-2-methyl-3:4-indeno(2′:1′)-benzopyrylium ferrichloride (Crabtree and Robinson), 1036.

$C_{20}H_{19}O_6FeCl_4$ *iso*Hæmatein ferrichloride tetramethyl ether (Crabtree and Robinson), 1039.

$C_{20}H_{19}O_6NS$ 6:7-Methylenedioxy-2:3(3-ketoindeno)(1:2)-quinoline methosulphate (Armit and Robinson), 836.

$C_{20}H_{21}N_2IS$ 4-Phenyl-2-*p*-dimethyl aminostyrylthiazole methiodide (Mills and Smith), 2735.

$C_{20}H_{21}N_2IS_2$ Methyldiethylthiocyanine iodides (Mills), 463; (Mills and Braunholtz), 1493.

$C_{20}H_{26}O_6Se_2Cu$ Copper selenium *OC*-bisacetylacetone (Morgan, Drew, and Barker), 2451.

C_{21} Group.

$C_{21}H_{15}O_2$ 3-Phenoxy-2-phenylbenzopyrylium hydroxide, ferrichloride of (Pratt and Robinson), 1582.

Phenyl 2-hydroxy-β-phenoxystyryl ketone (Pratt and Robinson), 1581.

$C_{21}H_{16}O_4$ 7-Hydroxy-3-phenoxy-2-phenylbenzopyrylium hydroxide, ferrichloride of (Pratt and Robinson), 1584.

$C_{21}H_{24}O_8$ Pentamethoxy-β-gambier-catechincarboxylic acid (Nierenstein), 28.

$C_{21}H_{26}O_7$ 2-Hydroxy-4:6:3′:4′-tetramethoxy-3-ethoxy-3-phenylchroman (Nierenstein), 610.

21 III

$C_{21}H_{15}O_4N_3$ 2-Chloroacetylaminoanthraquinone pyridinium hydroxide salts of (Barnett and Cook), 796.

$C_{21}H_{17}O_5N$ 4′-Dimethylamino-trihydroxy-9-phenylfluorones (Mukerji), 550.

$C_{21}H_{20}NBr$ Cinnamylidenequinaldine ethobromide (Mills and Hamer), 2013.

$C_{21}H_{20}NI$ Cinnamylidenequinaldine ethiodide (Mills and Hamer), 2012.

$C_{21}H_{22}O_3N_2$ Methylanhydropicrorocellin (Forster and Saville), 821.

$C_{21}H_{24}O_2N_2$ Dianilide of *trans*-3:3-diethyl*cyclo*propane-1:2-dicarboxylic acid (Deshapande and Thorpe), 1437.

$C_{21}H_{24}O_3N_2$ Dianilide of 3:3-diethyl*cyclo*propanol-1:2-dicarboxylic acid (DESHAPANDE and THORPE), 1441.

$C_{21}H_{28}O_3N_2$ Ethylhydrocupreine, salt of tropic acid with (KING and PALMER), 2583.

Ethylhydrocupreidine, salts of tropic acid with (KING and PALMER), 2583.

21 IV

$C_{21}H_{17}O_5NS$ Orcinolsulphamphthalein (DUTT), 2391.

$C_{21}H_{19}O_{12}N_3Pb_4$ Lead 4-nitro-*o*-tolyloxide (GODDARD and WARD), 265.

$C_{21}H_{19}N_2IS$ 4-Phenyl-3-methyl-2-thiazolenyl-4-quinolylmethane methiodide (MILLS and SMITH), 2736.

$C_{21}H_{21}O_2NS_2$ Dibenzylsulphine-*p*-toluenesulphonylimine (MANN and POPE), 1053.

$C_{21}H_{21}O_4FeCl_4$ 7:5′:6′-Trimethoxy-2-ethyl-3:4-indeno(2′:1′)-benzopyrylium ferrichloride (CRABTREE and ROBINSON), 1037.

$C_{21}H_{21}O_5FeCl_4$ 7:8:5′:6′-Tetramethoxy-2-methyl-3:4-indeno(2′:1′)-benzopyrylium ferrichloride (CRABTREE and ROBINSON), 1041.

$C_{21}H_{21}N_2IS$ 2:1′-Diethylthio*iso*cyanine iodide (BRAUNHOLTZ and MILLS), 2006.

1′:6′-Dimethyl-2-ethylthio*iso*cyanine iodide (BRAUNHOLTZ and MILLS), 2007.

$C_{21}H_{21}N_2IS_2$ 2:2′-Diethylcarbothiocyanine iodide (MILLS), 462; (MILLS and BRAUNHOLTZ), 1493.

$C_{21}H_{24}ON_5Cl_3$ 2:4:5:7-Tetra-amino-4′-dimethylamino-9-phenylfluorone trichloride (MUKERJI), 550.

C_{22} Group.

$C_{22}H_{16}O_5$ Methylenedioxybenzoylbenzoin (GREENE and ROBINSON), 2190.

Resorcinolphenylsuccinein (LAPWORTH and MCRAE), 2723.

$C_{22}H_{16}N_4$ Carbazole-3-azo-β-naphthylamine (MORGAN and READ), 2714.

$C_{22}H_{18}O_4$ 4′-Methoxybenzoylbenzoin (GREENE and ROBINSON), 2189.

$C_{22}H_{22}O_3$ Phenolcamphorein anhydride (SINGH, RAI, and LAL), 1425.

$C_{22}H_{22}O_5$ Quinolcamphorein (SINGH, RAI, and LAL), 1427.

Resorcinolcamphorein (KRISHNA), 255; (SIRCAR and DUTT), 1284.

$C_{22}H_{22}O_7$ Phloroglucinolcamphorein (SIRCAR and DUTT), 1286; (SINGH, RAI, and LAL), 1428.

Pyrogallolcamphorein (SINGH, RAI, and LAL), 1428.

$C_{22}H_{24}O_4$ Phenolcamphorein (KRISHNA), 254; (SINGH, RAI, and LAL), 1425.

$C_{22}H_{24}O_6$ Catecholcamphorein (SINGH, RAI, and LAL), 1427.

$C_{22}H_{26}O_8$ 2-Acetoxy-3:4:6:3′:4′-pentamethoxy-3-phenylchroman (NIERENSTEIN), 610.

Pentamethoxymethyl β-gambier-catechin-carboxylate (NIERENSTEIN), 27.

$C_{22}H_{36}O_3$ Capsularin (SAHA and CHOUDHURY), 1044.

$C_{22}H_{44}O_2$ Behenic acid, sodium salt, properties of solutions of (FLECKER and TAYLOR), 1101.

22 III

$C_{22}H_{12}O_5N_2$ 2:4-Diphthaliminophenol (MUKERJI), 549.

$C_{22}H_{12}O_5Br_4$ Phenylsuccinyleosin (LAPWORTH and MCRAE), 2724.

$C_{22}H_{12}O_6N_2$ 4:6-Diphthaliminoresorcinol (MUKERJI), 549.

$C_{22}H_{14}O_4N_2$ 2:3-Dipiperonylquinoxaline (GREENE and ROBINSON), 2194.

$C_{22}H_{15}ON_3$ Carbazole-3-azo-β-naphthol (MORGAN and READ), 2713.

$C_{22}H_{15}O_7N$ 6′-Nitro-3′:4′-methylenedioxybenzoylbenzoin (GREENE and ROBINSON,) 2190.

$C_{22}H_{17}Cl_2Bi$ Diphenyl-α-naphthylbismuthine dichloride (CHALLENGER and WILKINSON), 102.

$C_{22}H_{18}O_5Br_4$ Tetrabromoresorcinolcamphorein (SIRCAR and DUTT), 1285; (SINGH, RAI, and LAL), 1429.

$C_{22}H_{20}ON_4$ 2-Hydrindonecarboxylic acid phenylhydrazide phenylhydrazone (PERKIN and TITLEY), 1568.

$C_{22}H_{20}O_4Br_4$ Tetrabromophenolcamphorein (KRISHNA), 255.

$C_{22}H_{23}O_4N$ *m*-Aminophenolcamphorein (SIRCAR and DUTT), 1286.

$C_{22}H_{24}O_4N_6$ *cyclo*Hexane*spirocyclo*pentane-3:4-dione osazone (KON), 523.

$C_{22}H_{24}N_2S_2$ Benzenedi-*p*-thiodimethylaniline (SMILES and GRAHAM), 2510.

$C_{22}H_{24}N_3Cl$ Substance, from *s*-ditolylthiocarbamide and chloropicrin (RÂY and DAS), 327.

$C_{22}H_{25}O_2N_3$ *m*-Phenylenediaminecamphorein (SIRCAR and DUTT), 1286.

$C_{22}H_{28}O_4N_2$ Dimethylpicrorocellin (FORSTER and SAVILLE), 820.

$C_{22}H_{28}N_2S_2$ *p*-Xylenedi-*p*-thiodimethylaniline (SMILES and GRAHAM), 2510.

$C_{22}H_{29}O_9N$ 2-Salicylidene-3:5:6-triacetyl-1-ethyl glucosamine (IRVINE and EARL), 2380.

$C_{22}H_{30}O_2S_2$ ββ′-Diphenoxy-αα′-dimethyldi*iso*butyl disulphide (POPE and SMITH), 1168.

$C_{22}H_{30}O_8N_2$ Ethyl 2:4-dicyano-2:4-dicarboxy*cyclo*butane-1:3-di-α-propionate (INGOLD, PERREN, and THORPE), 1787.

22 IV

$C_{22}H_{21}O_2N_2P$ Ethyltriphenylphosphineglyoxylate-azine, reactions of (BRAUNHOLTZ), 304.

$C_{22}H_{21}O_4NS$ Trimethyl derivative of phenolsulphamphthalein (DUTT), 2390.

$C_{22}H_{23}N_2IS$ 5-Methyl-2:1′-diethylthio*iso*cyanine iodide (BRAUNHOLTZ and MILLS), 2007.

5:1′:6′-Trimethyl-2-ethylthio*iso*cyanine iodide (BRAUNHOLTZ and MILLS), 2007.

C_{23} Group.

$C_{23}H_{16}O_3$ 5:6-Diketo-7:7-dimethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 560.

$C_{23}H_{16}O_7$ Benzoylpiperoin (GREENE and ROBINSON), 2187.

$C_{23}H_{18}O$ 7:7-Dimethyl-α-dinaphthaxanthen, oxidation of (SEN-GUPTA and TUCKER), 559.

$C_{23}H_{18}O_3$ 5:9-Dihydroxy-7:7-dimethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 561.

$C_{23}H_{22}O_3$ 5:9-Dimethoxy-7:7-dimethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 562.

$C_{23}H_{32}O_2$ Di*iso*amyloxydiphenylmethane (MACKENZIE), 1696.

23 III

$C_{23}H_{15}O_8N$ 6′-Nitro-3:4:3′:4′-dimethylenetetraoxybenzoylbenzoin (GREENE and ROBINSON), 2192.

$C_{23}H_{17}O_5N$ Benzoyl-3-benzoyloxy-4-methoxymandelonitrile (GREENE and ROBINSON), 2195.

$C_{23}H_{21}O_3N$ *p*-Methoxybenzylcinnamanilides (INGOLD and PERREN), 2387.

$C_{23}H_{21}O_6N_7$ *p*-Nitrobenzylidenebis-*p*-nitrobenzaldehydemethylhydrazone (BRADY and MCHUGH), 1651.

$C_{23}H_{24}O_3N_2$ 4′:4″-Tetramethyldiamino-2:5-dihydroxyfuchsones (MUKERJI), 551.

$C_{23}H_{26}O_4N_2$ Brucine, salts of di- and tetra-nitrodiphenic acids with (CHRISTIE and KENNER), 617.

$C_{23}H_{33}O_{10}N$ Ethyl 2-cyano-2:4:4-tricarboxy*cyclo*butane-1-acetate-3-α-propionate (INGOLD, PERREN, and THORPE), 1788.

23 IV

$C_{23}H_{19}ON_4Cl$ 4-Chloroacetylaminonaphthalene-1-azobenzene pyridinium chloride (BARNETT and COOK), 795.

$C_{23}H_{19}O_6NS$ Diacetyl derivative of phenolsulphamphthalein (DUTT), 2390.

$C_{23}H_{23}O_3N_3S$ 4:4′-Tetramethyldiamino-2:2′-oxidophenylsulphamphthalein (DUTT), 2394.

$C_{23}H_{25}N_2IS_2$ 5:5′-Dimethyl-2:2′-diethylcarbothiocyanine iodide (MILLS), 464.

23 V

$C_{23}H_{23}ON_2IS$ 6′-Ethoxy-2:1′-diethylthio*iso*cyanine iodide (BRAUNHOLTZ and MILLS), 2007.

C_{24} Group.

$C_{24}H_{16}N_2$ Aminophenanthranaphthazines (SIRCAR and DUTT), 1947.

$C_{24}H_{16}O_4$ ββ-Di-2-α-naphthaquinonylpropane (SEN-GUPTA and TUCKER), 561.

$C_{24}H_{16}N_4$ Diaminophenanthranaphthazines (SIRCAR and DUTT), 1946.

αα′-Dicyano-2:3-dibenzylquinoxaline (DUTT and SEN), 2664.

$C_{24}H_{17}N_5$ αα′-Dicyano-7-amino-2:3-dibenzylquinoxaline (DUTT and SEN), 2665.

$C_{24}H_{18}O_3$ 5:6-Diketo-7-methyl-7-ethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 563.

$C_{24}H_{18}O_4$ ββ-Di-2-α-naphthaquinonylbutane (SEN-GUPTA and TUCKER), 564.

$C_{24}H_{20}O$ 7-Methyl-7-ethyl-α-dinaphthaxanthen, oxidation of (SEN-GUPTA and TUCKER), 563.

$C_{24}H_{20}O_3$ 5:9-Dihydroxy-7-methyl-7-ethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 564.

5:6-Diketo-7-methyl-7-*n*-propyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 566.

Fluoran derivative of camphoric anhydride (KRISHNA), 255.

$C_{24}H_{20}Pb$ Lead tetraphenyl, use of, in preparation of organo-metallic compounds (GODDARD, ASHLEY, and EVANS), 978.

$C_{24}H_{20}Sn$ Tin tetraphenyl, use of, in preparation of organo-metallic compounds (GODDARD, ASHLEY, and EVANS), 978; action of thallic chloride on (D. and A. E. GODDARD), 259.

$C_{24}H_{26}O_3$ *o*-Cresolcamphorein anhydride (SINGH, RAI, and LAL), 1427.

$C_{24}H_{28}O_4$ *o*-Cresolcamphorein (SINGH, RAI, and LAL), 1426.

Dimethyl ether of phenolcamphorein (KRISHNA), 254.

24 III

$C_{24}H_{11}O_4N_4$ Bromodinitrophenanthranaphthazine (SIRCAR and DUTT), 1948.

$C_{24}H_{12}N_2Br_2$ 2:7-Dibromophenanthranaphthazine (SIRCAR and DUTT), 1947.

$C_{24}H_{13}O_2N_3$ Nitrophenanthranaphthazines (SIRCAR and DUTT), 1946.

$C_{24}H_{14}ON_2$ Hydroxyphenanthranaphthazines (SIRCAR and DUTT), 1947.

$C_{24}H_{14}O_2N_2$ Dihydroxyphenanthranaphthazines (Sircar and Dutt), 1947.

$C_{24}H_{15}O_2N$ 2-Benzoylaminobenzanthrone (Perkin and Spencer), 481.

$C_{24}H_{15}O_3N$ Hydroxybenzanthronecarboxyanilide (Bradshaw and Perkin), 913.

$C_{24}H_{15}O_5N$ Nitro-derivative of 5:6-diketo-7:7-dimethyl-5:6-dihydro-α-dinaphthaxanthen (Sen-Gupta and Tucker), 560.

$C_{24}H_{16}O_2N_2$ 2:6-Diketo-3:5-dibenzylidene-2:3:5:6-tetrahydro-*m*-α-benzbispyrrole (Davies and Hickox), 2653.

$C_{24}H_{16}O_4S_2$ Naphthalenedi-*m*-thiobenzoic acid (Smiles and Graham), 2509.

$C_{24}H_{17}O_5N$ Nitro-derivative of 5:6-diketo-7-methyl-7 ethyl-5:6-dihydro-α-dinaphthaxanthen (Sen-Gupta and Tucker), 563.

$C_{24}H_{20}OTl_2$ Thallium diphenyl oxide, and its salts (A. E. and D. Goddard), 487.

$C_{24}H_{20}O_7N_2$ Substance, from *m*-dinitrobenzene and hydroxymethoxydistyryl ketone (Buck and Heilbron), 1099.

$C_{24}H_{22}O_4N_4$ 2:7-Dinitrophenanthranaphthazine (Sircar and Dutt), 1945.

$C_{24}H_{23}O_2N$ ββ′-Di-2-naphthoxydiethylamine (Clemo and Perkin), 646.

$C_{24}H_{26}O_4Br_2$ Dibromo-*o*-cresolcamphorein (Singh, Rai, and Lal), 1426.

$C_{24}H_{29}O_2N$ Phenylurethane of benzyl-*p*-menthenol (Read and Smith), 581.

24 IV

$C_{24}H_{11}O_2N_3Br_2$ Dibromonitrophenanthranaphthazine (Sircar and Dutt), 1948.

$C_{24}H_{12}O_2N_3Br$ 5-Bromo-4-nitrophenanthranaphthazine (Sircar and Dutt), 1949.

$C_{24}H_{14}O_5N_2S$ 2:7-Dihydroxyphenanthranaphthazine-12-sulphonic acid (Sircar and Dutt), 1950.

$C_{24}H_{15}O_3N_3S$ 2-Aminophenanthranaphthazine-12-sulphonic acid, and its sodium salt (Sircar and Dutt), 1950.

$C_{24}H_{15}O_4N_2Br$ Phenobetaine of alizarindipyridinium dibromide (+ H_2O) (Barnett and Cook), 1387.

Phenobetaine of hystazarindipyridinium dibromide (Barnett and Cook), 1388.

Phenobetaine of quinizarin-2:3-dipyridinium dibromide (Barnett and Cook), 1384.

$C_{24}H_{16}O_3N_4S$ 2:7-Diaminophenanthranaphthazine-12-sulphonic acid, and its sodium salt (Sircar and Dutt), 1949.

$C_{24}H_{16}O_4N_2Br_2$ Alizarindipyridinium dibromide (Barnett and Cook), 1386.

Hystazarindipyridinium dibromide (Barnett and Cook), 1388.

Quinizarin-2:3-dipyridinium dibromide (Barnett and Cook), 1384.

$C_{24}H_{16}O_4N_2Br_4$ Alizarindipyridinium perbromide (Barnett and Cook), 1386.

24 V

$C_{24}H_{27}ON_2IS$ 6′-Ethoxy-5-methyl-2:1′-diethylthio*iso*cyanine iodide (Braunholtz and Mills), 2008.

C_{25} Group.

$C_{25}H_{18}N_4$ αα′-Dicyano-2:3-dibenzyl-8-methylquinoxaline (Dutt and Sen), 2665.

$C_{25}H_{20}O_3$ 5:6-Diketo-7:7-diethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 565.

$C_{25}H_{20}O_4$ Di-2-α-naphthaquinonylpentanes (SEN-GUPTA and TUCKER), 565.

$C_{25}H_{22}O$ 7:7-Diethyl-α-dinaphthaxanthen, oxidation of (SEN-GUPTA and TUCKER), 565.

7-Methyl-7-*n*-propyl-α-dinaphthaxanthen, oxidation of (SEN-GUPTA and TUCKER), 566.

$C_{25}H_{22}O_3$ 5:9-Dihydroxy-7:7-diethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 565.

5:9-Dihydroxy-7-methyl-7-*n*-propyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 566.

$C_{25}H_{42}O_5$ Menthyl acetylmalonate (SHIMOMURA and COHEN), 2054.

25 III

$C_{25}H_{19}O_5N$ Nitro-derivative of 5:6-diketo-7:7-diethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 565.

$C_{25}H_{21}N_2P$ Triphenylphosphinebenzaldehydeazine, and its reactions (BRAUNHOLTZ), 305.

$C_{25}H_{25}O_2N_2$ *trans*-1-Benzyl-1-methyl*cyclo*propane-2:3-dicarboxylanilide (BIRCH and THORPE), 1832.

25 IV

$C_{25}H_{25}N_2Br_2I$ Dibromo-1:1′-diethylazurine iodides (MOUDGILL), 1510.

25 V

$C_{25}H_{28}O_8N_2S_2Na_2$ Xylene cyanole *FF* (HICKMAN and LINSTEAD), 2504.

C_{26} Group.

$C_{26}H_{24}O_3$ 5:9-Dimethoxy-7-methyl-7-ethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 564.

$C_{26}H_{28}O_6$ Diacetyl derivative of phenolcamphorein (KRISHNA), 254.

$C_{26}H_{32}O_4$ Diethyl ether of phenolcamphorein (KRISHNA), 254.

$C_{26}H_{44}O_5$ Menthyl ethoxymethylenemalonate (SHIMOMURA and COHEN), 2055.

26 III

$C_{26}H_{19}N_2Cl$ *iso*Quinoline-red (HARRIS and POPE), 1032.

$C_{26}H_{20}O_4N_4$ 1:4-Diphenyl-3-*o*-nitrophenyl-2-*p*-nitrophenyl-1:3-dimethindiazidine (INGOLD and PIGGOTT), 2799.

$C_{26}H_{21}O_3N_3$ 1:4-Diphenyl-3-*m*-nitrophenyl-2-*p*-hydroxyphenyl-1:3-dimethindiazidine (INGOLD and PIGGOTT), 2798.

$C_{26}H_{32}O_3N_2$ *m*-Dimethylaminophenocamphorein, hydrochloride of (SIRCAR and DUTT), 1285.

$C_{26}H_{37}O_{12}N$ Ethyl 2-cyano-2:4:4-tricarboxy*cyclo*butane-3-α-propionate-1-malonate (INGOLD, PERREN, and THORPE), 1788.

26 IV

$C_{26}H_{18}O_5N_2Br_2$ Acetyl derivative of alizarindipyridinium dibromide (BARNETT and COOK), 1387.

$C_{26}H_{21}ON_2Br$ 1:4-Diphenyl-3-*p*-bromophenyl-2-*p*-hydroxyphenyl-1:3-dimethindiazidine (INGOLD and PIGGOTT), 2798.

C_{27} Group.

$C_{27}H_{32}O_5$ Diacetoxy-7:7-dimethyl-α-dinaphthaxanthens (SEN-GUPTA and TUCKER), 560, 562.

$C_{27}H_{24}O_2$ Diphenyldihydroxy-*m*- and -*p*-tolylmethanes (MACKENZIE), 1698.

$C_{27}H_{30}O_{15}$ Pelargonin (CURREY), 319.
$C_{27}H_{40}O_{14}$ Ethyl 2:2:4:4-tetracarboxy*cyclo*butane-3-acetate-1-malonate (INGOLD, PERREN, and THORPE), 1788.

27 III

$C_{27}H_{21}N_2Cl$ 6′-Methyl*iso*quinoline-red (HARRIS and POPE), 1032.
$C_{27}H_{37}O_4N$ Substance, from *p*-dimethylaminobenzaldehyde and methoxyhydroxydistyryl ketone (BUCK and HEILBRON), 1099.
$C_{27}H_{43}O_8N$ Cevine, preparation of (MACBETH and ROBINSON), 1574.

27 IV

$C_{27}H_{17}O_2N_2Br_5$ Bromomalontetrabromophenylamide (WEST), 2200.
$C_{27}H_{21}O_2N_2Cl$ Chloromalontetraphenylamide (WEST), 2200.
$C_{27}H_{21}O_2N_2Br$ Bromomalontetraphenylamide (WEST), 2199.

C_{28} Group.

$C_{28}H_{14}O_4$ Substance, from 2-hydroxyanthraquinone and dextrose (BRADSHAW and PERKIN), 921.
$C_{28}H_{16}O_4$ 2:2′-Dihydroxydianthraquinone (BRADSHAW and PERKIN), 921.
$C_{28}H_{18}O_2$ 2:2′-Dihydroxydianthryl (PERKIN and WHATTAM), 290.
$C_{28}H_{18}O_4$ 3:3′-Dihydroxydianthrone (PERKIN and WHATTAM), 293.
$C_{28}H_{18}N_4$ *αα′*-Dicyano-2:3-dibenzyl-1:4-naphthaquinoxaline (DUTT and SEN), 2665.
$C_{28}H_{24}O_5$ Diacetoxy-7-methyl-7-ethyl-*α*-dinaphthaxanthens (SEN-GUPTA and TUCKER), 564.
$C_{28}H_{32}O_6$ Diacetyl derivative of *o*-cresolcamphorein (SINGH, RAI, and LAL), 1426.
$C_{28}H_{44}O_{13}$ Methyl heptamethylamygdalinate (HAWORTH and LEITCH), 1924.

28 III

$C_{28}H_{23}N_2Cl$ 6′-Ethyl*iso*quinoline-red (HARRIS and POPE), 1032.
$C_{28}H_{24}ON_4$ Substance, from *N*-ethylcarbazole-3-diazonium chloride and ammonia (MORGAN and READ), 2717.

28 IV

$C_{28}H_{18}O_3N_4S$ *αα′*-Dicyano-2:3-dibenzyl-1:4-naphthaquinoxaline-7-sulphonic acid (DUTT and SEN), 2665.
$C_{28}H_{16}O_4N_4S$ *αα′*-Dicyano-10-hydroxy-2:3-dibenzyl-1:4-naphthaquinoxaline-8-sulphonic acid (DUTT and SEN), 2666.
$C_{28}H_{28}O_4N_2S_2$ Di(toluene-*p*-sulpho)diphenylethylenediamine (CLEMO and PERKIN), 648.

C_{29} Group.

$C_{29}H_{30}ON_2$ Quinoxaline derivative of 5:6-diketo-7:7-dimethyl-5:6-dihydro-*α*-dinaphthaxanthen (SEN-GUPTA and TUCKER), 560.

29 IV

$C_{29}H_{33}O_2N_2I$ Diethoxy-1:1′-diethylcarbocyanine iodides (BRAUNHOLTZ), 171.

C_{30} Group.

$C_{30}H_{20}O_4$ 2:2′-Dimethoxydianthraquinone (BRADSHAW and PERKIN), 920.
$C_{30}H_{22}O_4$ 3:3′-Dimethoxydianthrone (PERKIN and WHATTAM), 294.
$C_{30}H_{30}O_{11}$ Tetracetyl derivative of pyrogallolcamphorein (SINGH, RAI, and LAL), 1428.

30 III

$C_{30}H_{17}O_4N_5$ Dinitroanilinophenanthranaphthazine (SIRCAR and DUTT), 1949.

$C_{30}H_{17}ClBr_2$ 2:7-Dibromonaphthaflavinduline (DUTT), 1952.

$C_{30}H_{18}O_3N_4$ 4-Nitro-5-anilinophenanthranaphthazine (SIRCAR and DUTT), 1949.

$C_{30}H_{20}O_4Se$ Selenium dehydrobisdibenzoylmethane (MORGAN, DREW, and BARKER), 2471.

$C_{30}H_{20}O_4Se_2$ Selenium dibenzoylmethane (MORGAN, DREW, and BARKER), 2466.

$C_{30}H_{20}O_4Se_3$ *cyclo*Triselenium bisdibenzoylmethane (MORGAN, DREW, and BARKER), 2467.

$C_{30}H_{20}N_3Cl$ Aminonaphthaflavindulines (DUTT), 1954.

$C_{30}H_{21}N_4Cl$ Diaminonaphthaflavindulines (DUTT), 1954.

$\alpha\alpha'$-Dicyano-1-phenyl-2:3-dibenzylquinoxalinium chloride (DUTT and SEN), 2666.

$C_{30}H_{22}ON_2$ Quinoxaline derivative of 5:6-diketo-7-methyl-7-ethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 563.

$C_{30}H_{22}O_4Se$ Selenium bisdibenzoylmethane (MORGAN, DREW, and BARKER), 2464.

$C_{30}H_{22}O_4Se_2$ Diselenium bisdibenzoylmethane (MORGAN, DREW, and BARKER), 2467.

30 IV

$C_{30}H_{17}O_4N_4Cl$ Dinitronaphthaflavindulines (DUTT), 1954.

$C_{30}H_{18}O_2N_3Cl$ Nitronaphthaflavindulines (DUTT), 1954.

$C_{30}H_{18}O_3N_3Br$ 3-Bromonaphthaflavinduline nitrate (DUTT), 1953.

$C_{30}H_{19}ON_2Cl$ Hydroxynaphthaflavindulines (DUTT), 1955.

$C_{30}H_{19}O_2N_2Cl$ Dihydroxynaphthaflavindulines (DUTT), 1954.

30 V

$C_{30}H_{16}O_2N_3ClBr_2$ Dibromonitronaphthaflavinduline (DUTT), 1955.

$C_{30}H_{16}O_4N_4ClBr$ Bromodinitronaphthaflavinduline (DUTT), 1955.

C_{31} Group.

$C_{31}H_{22}O_5$ Dibenzoyloxydistyryl ketone (BUCK and HEILBRON), 1097.

31 III

$C_{31}H_{24}ON_2$ Quinoxaline derivative of 5:6-diketo-7:7-diethyl-5:6-dihydro-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 565.

$C_{31}H_{23}N_2P$ Triphenylphosphinebenzophenoneazine, reactions of (BRAUNHOLTZ), 301

31 IV

$C_{31}H_{25}O_{15}NS$ 1:2:4:5-Tetra-acetoxybenzenesulphamphthalein (DUTT), 2392.

$C_{31}H_{28}O_2N_2Cl_2$ Dichloromalontetrabenzylamide (WEST), 2201.

$C_{31}H_{29}O_2N_2Cl$ Chloromalontetrabenzylamide (WEST), 2200.

$C_{31}H_{29}O_2N_2Br$ Bromomalontetrabenzylamide (WEST), 2200.

C_{32} Group.

$C_{32}H_{20}O_6$ 2:2′-Diacetoxydianthraquinone (BRADSHAW and PERKIN), 920.

$C_{32}H_{22}O_4$ 2:2′-Diacetoxydianthryl (PERKIN and WHATTAM), 291.

$C_{32}H_{22}O_6$ 3:3′-Diacetoxydianthrone (PERKIN and WHATTAM), 292.

$C_{32}H_{24}O_{15}$ 1:2:4:5:7:8-Hexa-acetoxyfluoran (MUKERJI), 548.

$C_{32}H_{25}N_4$ αα′-Dicyano-1-*p*-tolyl-2:3-dibenzyl-6-methylquinoxaline (DUTT and SEN), 2666.

$C_{32}H_{46}O_{13}$ Penta-acetylcapsularin (SAHA and CHOUDHURY), 1045.

32 III

$C_{32}H_{49}O_3N$ Cevadine (MACBETH and ROBINSON), 1571.

32 IV

$C_{32}H_{20}O_2N_4S_2$ Diphenylbisazodi-α-naphthol trisulphide (WATSON and DUTT), 2419.

$C_{32}H_{22}O_2N_4S_2$ Diphenylbisazohydroxynaphthyl mercaptans (WATSON and DUTT), 2416.

C_{33} Group.

$C_{33}H_{22}O_6N_6S_3$ Substance, from "saccharin" and *m*-phenylenediamine hydrochloride (DUTT), 2393.

$C_{33}H_{22}O_6N_7S_3$ Substance, from "saccharin" and 4:6-diaminoresorcinol hydrochloride (DUTT), 2394.

$C_{33}H_{24}O_6NS$ Dibenzoyl derivative of phenolsulphamphthalein (DUTT), 2390.

C_{34} Group.

$C_{34}H_{23}N_4Cl$ αα′-Dicyano-1-α-naphthyl-2:3-dibenzylquinoxalinium chloride (DUTT and SEN), 2666.

αα′-Dicyano-1-phenyl-2:3-dibenzyl-1:4-naphthaquinoxalinium chloride (DUTT and SEN), 2666.

C_{36} Group.

$C_{36}H_{24}N_4$ 2:7-Dianilinophenanthranaphthazine (SIRCAR and DUTT), 1948.

$C_{36}H_{32}O_6$ Dibenzoyl derivative of phenolcamphorein (KRISHNA), 254.

$C_{36}H_{36}O_{21}$ Acetylacertannin (PERKIN and UYEDA), 69.

36 III

$C_{36}H_{20}O_9N_4$ Diphthalyl derivative of 2:4:5:7-tetra-amino-1:8-dihydroxyfluoran (MUKERJI), 549.

$C_{36}H_{23}O_2N_5$ Nitrodianilinophenanthranaphthazine (SIRCAR and DUTT), 1948.

$C_{36}H_{24}O_3N_4$ 3-Anilinonaphthaflavinduline nitrate (DUTT), 1953.

$C_{36}H_{29}N_5Cl$ αα′-Dicyano-6-anilino-1-phenyl-2:3-dibenzylquinoxalinium chloride (DUTT and SEN), 2667.

$C_{36}H_{38}O_3N_4$ Base, and its salts, from oxidation of base, $C_{18}H_{20}ON_2$ (MANN), 2180.

C_{37} Group.

$C_{37}H_{26}O_5$ 5:9-Dibenzoyloxy-7:7-dimethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 562.

C_{38} Group.

$C_{38}H_{28}O_5$ 5:9-Dibenzoyloxy-7-methyl-7-ethyl-α-dinaphthaxanthen (SEN-GUPTA and TUCKER), 564.

$C_{38}H_{36}O_{20}$ Paullinia tannin (NIERENSTEIN), 23.

38 III

$C_{38}H_{34}O_{12}Sn_2$ Pentabenzoyl derivative of methylstannonic acid (LAMBOURNE), 2539.

C_{39} Group.

$C_{39}H_{52}O_{12}N_2$ *o*-Nitrobenzoylcevadine (MACBETH and ROBINSON), 1574.

C_{41} Group.

$C_{41}H_{49}O_{14}N_3$ Di(*o*-nitrobenzoyl)cevine (MACBETH and ROBINSON), 1575.

C_{42} Group.

$C_{42}H_{26}O_4$ 2:2′-Dibenzoyloxydianthryl (PERKIN and WHATTAM), 291.

42 III

$C_{42}H_{29}N_4Cl$ 2:7-Dianilinonaphthaflaviduline (DUTT), 1953.

C_{50} Group.

$C_{50}H_{30}ON_{12}S_{18}$ Substance, from chloropicrin and potassium 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RÂY and DAS), 325.

C_{51} Group.

$C_{51}H_{62}O_{20}$ Methoxy-derivative of paullinia tannin (NIERENSTEIN), 27.

C_{52} Group.

$C_{52}H_{53}O_6N_3S_3As_2$ Substance, from triphenylarsine-*p*-toluenesulphonylimine and *p*-toluenesulphonamide (MANN and POPE), 1054.

ERRATA.

Vol. 115 (Trans., 1919).

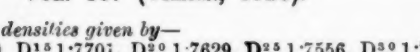
Page	Line	
817	2	*for* "*N*/10-sodium hydroxide" *read* "0·876*N*/10-sodium hydroxide."

Vol. 117 (Trans., 1920).

1221	3*	*Replace the densities given by*— "D_4^0 1·7919, D_4^{15} 1·7701, D_4^{20} 1·7629, D_4^{25} 1·7556, D_4^{30} 1·7484 Mean coefficient of dilatation between 0° and 30° 0·00083."

Vol. 119 (Trans., 1921).

1204	18	*for* "*dimethyldihydroresorcinol*" *read* "cyclo*hexane*spirocyclo*hexane*-3 : 5-*dione*."
,,		formula XXXIV should read



1644	12*	(and throughout the paper) for "*Andropogon iwarancusa*" read "*Andropogon Jwarancusa*."

Vol. 121 (Trans., 1922).

35	20	*for* "$C_3O_{16}NFe_4$" *read* "$C_{13}O_{16}NFe_4$."
337	21	,, "Sidney" *read* "Sydney."
575	26	*after* "on" *insert* "the reduced."
600	25	*for* "$C_2H_4O_3ClSPb$" *read* "$C_4H_8O_6Cl_2S_2Pb$."
1134	17*	*delete* "Baeyer . . . and."
1304		formula IX should read $CH_3{\cdot}CO{\cdot}CH_2{\cdot}CH{:}CMeEt$.
1394	5	*should read* $\overset{+}{X}—Br + \overset{+}{Na}—\overset{-}{O}H—X.OH + \overset{+}{Na}—\overset{-}{Br}$.
1396	bottom	*for* "aqueous" *read* "alcoholic."
1642	17	*delete* "450 grams, or."
1754	5*	*for* "sulphimines" *read* "sulphilimines."
1954	7	,, "$C_{20}H_{17}O_4NCl$" *read* "$C_{20}H_{17}O_4N_4Cl$."
2278	19	,, "$[N_2]^2$" *read* "$[N_2]$."
2411	14*	,, "$4\frac{3}{4}$ hours" *read* "$4\frac{3}{4}$ mins."
2411	16*	,, "61 ,, " *read* "61 hours."
2420	6	,, "λ" *read* "$\frac{\lambda}{T}$"
2432	6	,, "*Part IX*" read "*Part XI*."
2624	10*	,, "4-nitro-" *read* "4-amino-."
2652	13*	,, "$C_{14}H_9O_2N_3$" *read* "$C_{10}H_9O_2N_3$."